FLEET OPERATORS' REFERENCE MANUAL

APR 13 1942

COMMERCIAL CAR JOURNAL

THE MAGAZINE FOR FLEET OPERATORS

APRIL 1942

Here in Washington where the streets and alleys are overcrowded with cars, trucks and buses, we are operating thirty trucks delivering fuel oil and coal. Our Reos with their short wheel base and small turning radius have proven beyond any doubt that they are just the truck for this type of work. Further, they have proven to be the most economical trucks in our fleet.

It seems that every driver we have has the outspoken desire to be placed as driver of one of our Reo trucks.

REO More-Load SPEED WAGONS and HEAVY DUTY TRUCKS

Reo fleet operated by the Action Fuel Co., Washington, D. C.
Sold by Reo Washington Company.

REO MOTORS, INC. LANSING, MICH.

Arms FOR THE UNITED NATIONS!

Material FOR ESSENTIAL INDUSTRY!

Food FOR SOLDIERS AND CIVILIANS!

. . all move dependably on

DODGE *Job-Rated* TRUCKS

Better BECAUSE OF CHRYSLER CORPORATION ENGINEERING

"Dependable Dodge Truck Service Is Vital to Victory," say Dodge Dealers

DODGE PLYMOUTH VICTORY QUALITY CHECK-UP

Dodge dealers are devoting their full energies and resources to keeping motorized equipment rolling. They have the right tools, the trained man power, and factory-approved parts to serve you well.

SEE YOUR DODGE DEALER FOR *VICTORY* QUALITY SERVICE—*VICTORY* QUALITY *USED VEHICLES*

• Never before have extra *quality*, extra *dependability*, and extra *power* been so important. Today's trucks *must* be able to serve *longer* hours on *longer* hauls and for a *longer* time.

Super-powered Dodge *Job-Rated* trucks are quality-built for extra thousands of miles of efficient, low-cost operation. They're *Job-Rated* for every capacity. Half-ton delivery trucks to 3-ton gas-powered or Diesel-powered haulers are sized *right* in every unit to do the job and *stay on the job*—with the *right-sized* engine, the *right* axles, the *right-sized* clutch, transmission, and brakes for each capacity.

If today's rationing regulations permit you to buy new trucks, buy the *best* . . . *Dependable* Dodge *Job-Rated* trucks that fit the job.

DODGE DIVISION, CHRYSLER CORPORATION, DETROIT, MICHIGAN

COMMERCIAL CAR JOURNAL

with which is combined Operation & Maintenance

Reg. U. S. Pat. Off.

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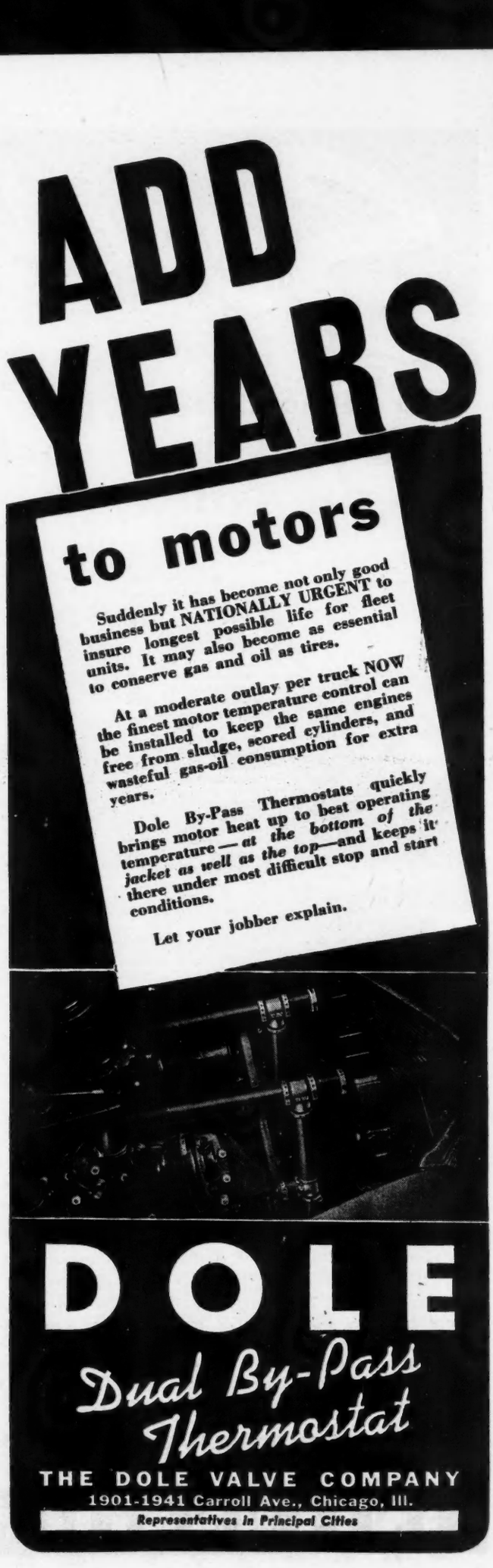
ADD YEARS
to motors
Suddenly it has become not only good business but NATIONALLY URGENT to insure longest possible life for fleet units. It may also become as essential to conserve gas and oil as tires.
At a moderate outlay per truck NOW the finest motor temperature control can be installed to keep the same engines free from sludge, scored cylinders, and wasteful gas-oil consumption for extra years.
Dole By-Pass Thermostats quickly brings motor heat up to best operating temperature — at the bottom of the jacket as well as the top—and keeps it there under most difficult stop and start conditions.
Let your jobber explain.
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Dual By-Pass Thermostat
THE DOLE VALVE COMPANY
1901-1941 Carroll Ave., Chicago, Ill.
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Keep 'em Rolling!

TRUCK INTERNATIONAL SERVICE

AMERICA'S TRUCKS are challenged today with the task of doing double-duty and hauling at double-quick time . . . extra hours, more trips, faster schedules. The trucks *now* on the job must carry the big load, for there will be *fewer and fewer new ones available for replacement.* Truck Service is of first importance today!

International's 250 Company-owned branches and thousands of dealers are responding to that need by equipping themselves *to do a service job better than ever before.* They pledge themselves to keep new and used trucks operating at peak efficiency.

The new Scheduled Preventive Maintenance Program is one example of International cooperation. Its aim is the inspection of all wearing parts, at scheduled intervals, to help prevent wear before it starts. It greatly reduces operating costs. It helps *keep trucks at work.*

Trained personnel, modern equipment, and complete stocks of *first-quality parts* are the cornerstones of the International dealer's service program. Keep America's trucks rolling for VICTORY.

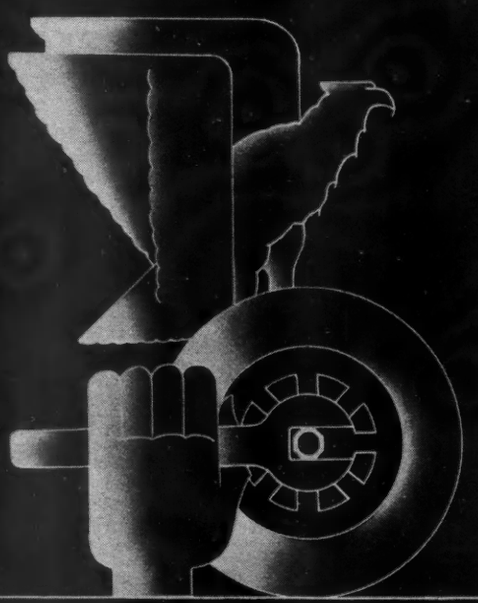
The Dealers and Servicemen of **INTERNATIONAL** give their best to keep America's Trucks rolling till peace is won.

INTERNATIONAL HARVESTER COMPANY
180 North Michigan Avenue Chicago, Illinois

INTERNATIONAL SERVICE

1942

FLEET OPERATORS' REFERENCE ANNUAL



KEEP 'EM ROLLING

The nation is at war and although burdened with shortages the operators of highway transportation equipment are being called upon to "Keep 'em Rolling" as a patriotic duty. Fleet operators recognize the importance of the task entrusted to them. They know that with proper maintenance the vehicles now in their hands can be kept operating steadily and efficiently in the promotion of Victory on the war front and high civilian morale on the home front. To help fleet operators attain these greatly desired objectives, manufacturers cooperated in the preparation of this Reference Annual because they know that only when properly maintained can their products give utmost satisfaction. They join in dedicating this issue to fleetmen who will "Keep 'em Rolling."

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VITAL STATISTICS OF THE

Truck Production

(U. S. & Canada)

	Number
1904	411
1905	450
1906	500
1907	700
1908	1,500
1909	3,255
1910	6,000
1911	10,681
1912	22,000
1913	23,500
1914	25,375
1915	74,000
1916	92,130
1917	128,157
1918	227,250
1919	275,943
1920	321,789
†1921	164,304
†1922	277,140
†1923	426,505
†1924	434,140
†1925	557,056
†1926	556,818
†1927	497,020
†1928	588,983
†1929	826,817
†1930	599,991
†1931	434,176
†1932	245,282
†1933	358,548
†1934	599,397
†1935	732,005
†1936	818,377
†1937	947,502
†1938	530,425
†1939	757,553
†1940	889,884
†1941	1,270,647

Foreign assemblies of parts made in U. S. but assembled abroad are included in this table.

† Figures for 1921 to date are "factory sales" for U. S. plants and "production" for Canadian plants.

AGE OF TRUCKS IN USE*

Year	New Truck Registrations	Per Cent Surviving	Number Surviving	Average Age	Of Trucks in Use	Per Cent of Total
1941	640,697	100.0	640,697	½	640,697 are up to 1 year of age	13.56
1940	576,327	99.6	574,022	1½	1,214,719 " " " 2 years of age	25.70
1939	486,748	98.7	480,420	2½	1,695,139 " " " 3 " " "	35.87
1938	365,349	97.6	356,581	3½	2,051,720 " " " 4 " " "	43.41
1937	618,249	96.0	593,519	4½	2,645,239 " " " 5 " " "	55.97
1936	611,644	93.3	570,664	5½	3,215,903 " " " 6 " " "	68.05
1935	510,683	89.0	454,508	6½	3,670,411 " " " 7 " " "	77.66
1934	403,886	82.0	331,186	7½	4,001,597 " " " 8 " " "	84.67
1933	245,869	71.9	176,780	8½	4,178,377 " " " 9 " " "	88.41
1932	180,413	58.8	106,083	9½	4,284,460 " " " 10 " " "	90.66
1931	313,884	44.0	138,109	10½	4,422,569 " " " 11 " " "	93.58
1930	410,699	29.2	119,924	11½	4,542,493 " " " 12 " " "	96.12
1929	527,057	17.9	94,343	12½	4,636,836 " " " 13 " " "	98.11
1928	341,123	11.1	37,865	13½	4,674,701 " " " 14 " " "	98.91
1927	327,965	6.9	22,630	14½	4,697,331 " " " 15 " " "	99.39
1926	385,997	4.4	16,984	15½	4,714,315 " " " 16 " " "	99.75
1925	418,000†	2.8	11,704	16½	4,726,019 " " " 17 " " "	100.00

† Partly Estimated.
* These figures are purely a statistical approximation calculated from a life curve applicable to passenger cars.

TRUCK PRODUCTION BY CAPACITIES—UNITS

(U. S. and Canada)

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941†
¾ ton or less	141,859	144,869	109,220	79,127	99,028	172,089	249,957	316,208	395,157	194,827	292,768	338,670	440,768
1 ton and less than 1½	78,786	31,028	4,899	1,618	893	2,341	2,259	9,686	21,580	30,951	29,725	43,723	68,281
1½ ton and less than 2	523,691	370,541	289,418	144,113	228,239	376,475	420,597	423,503	441,156	246,200	344,199	354,235	463,137
2 ton and less than 2½	28,416	16,477	8,516	7,620	15,866	25,995	28,950	30,637	30,431	18,375	26,701	52,080	124,741
2½ ton, less than 3½	33,530	22,887	11,516	6,006	7,728	11,136	10,465	12,309	18,971	9,954	18,801	28,224	63,534
3½ ton and less than 5	8,643	6,412	4,532	2,689	2,859	4,752	3,612	4,621	6,170	4,539	7,619	8,788	15,068
5 ton and over	2,384	1,094	906	1,407	580	1,219	3,824	5,567	9,248	5,820	7,365	8,524	14,458
Special types	9,508	6,683	5,169	2,705	3,356	5,390	*12,341	*15,846	*24,789	*19,759	*30,375	*55,640	*80,670
Total	826,817	599,991	434,176	245,285	358,548	599,397	732,005	818,377	947,502	530,425	757,553	889,884	1,270,647

* Includes Station Wagons. † Partly Estimated.

TRUCK PRODUCTION BY CAPACITIES—PER CENT

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941†
¾ ton or less	17.1	24.0	25.2	32.3	27.6	28.6	34.1	38.6	41.7	36.7	38.6	38.0	34.7
1 ton and less than 1½	9.5	5.2	1.1	.6	.2	.4	.3	1.1	2.3	5.8	3.9	4.9	5.4
1½ ton and less than 2	63.4	61.7	66.6	58.8	63.7	62.9	57.5	52.0	46.6	46.4	45.5	39.8	36.4
2 ton and less than 2½	3.4	2.7	2.0	3.1	4.4	4.3	4.0	3.7	3.2	3.5	3.5	5.9	9.8
2½ ton and less than 3½	4.1	3.8	2.7	2.4	2.2	1.9	1.4	1.	2.0	1.9	1.0	3.2	5.0
3½ ton and less than 5	1.0	1.0	1.0	1.1	.8	.8	.5	.5	.6	.9	2.5	1.0	1.2
5 ton and over	.3	.2	.2	.6	.2	.2	.5	.7	1.0	1.1	1.0	1.0	1.1
Special types	1.2	1.4	1.2	1.1	.9	.9	*1.7	*1.9	*2.6	3.7	*4.0	*6.2	6.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

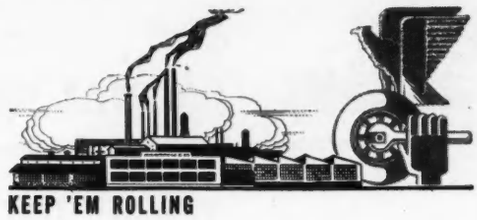
* Includes Station Wagons. † Partly Estimated.

TRUCK PRODUCTION BY MONTHS, BY YEARS

(U. S. and Canada)

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	
January	57,765	40,938	35,475	21,160	19,429	44,870	64,529	68,655	74,995	58,062	64,093	74,016	100,850	January
February	65,950	52,925	41,863	24,291	15,592	44,952	63,204	65,938	72,939	51,464	63,606	71,690	104,172	February
March	79,587	69,031	47,671	21,274	18,508	61,068	70,520	81,875	95,016	52,106	77,107	75,285	111,589	March
April	91,855	74,477	53,138	28,539	27,975	67,532	69,338	91,049	100,324	47,818	88,066	76,807	102,786	April
May	94,940	62,080	47,805	27,491	35,132	60,348	59,324	79,379	96,965	41,575	63,793	74,139	117,817	May
June	98,164	51,466	41,496	23,572	43,448	48,292	65,785	81,185	91,820	41,857	66,964	67,787	118,757	June
July	78,703	44,960	35,386	15,137	39,310	44,546	61,582	71,383	83,996	38,336	62,750	74,005	121,300	July
August	59,985	43,296	32,890	15,319	42,601	53,890	58,942	63,794	87,802	35,259	40,868	41,533	83,104	August
September	54,683	46,557	31,876	20,003	35,874	46,335	33,229	47,496	55,033	20,174	27,560	56,703	78,413	September
October	66,235	41,928	22,406	14,157	30,772	49,643	60,203	35,359	31,939	22,380	65,079	88,104	100,166	October
November	50,368	37,493	20,118	12,560	19,106	35,107	60,720	54,628	67,508	54,638	73,407	93,068	110,788	November
December	28,582	34,840	24,052	21,782	30,801	42,814	64,629	77,636	88,165	66,756	84,260	98,747	120,905	December
Total	826,817	599,991	434,176	245,285	358,548	599,397	732,005	818,377	947,502	530,425	757,553	889,884	1,270,647	Total

TRUCK INDUSTRY



NEW TRUCK REGISTRATIONS BY MAKES*

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941††
Autocar	2,941	2,009	1,748	1,015	1,127	1,139	1,001	1,451	2,181	1,617	2,044	1,955	2,510
Brockway	4,533‡	3,780‡	1,685‡	752	875	1,213	1,245	1,695	1,593	1,303	1,815	1,672	2,294
Chevrolet	160,892	118,253	99,600	60,784	99,880	157,507	167,129	204,344	183,674	119,479	169,457	194,038	212,797
Diamond T	3,590	2,888	2,483	2,250	4,139	5,440	6,454	8,750	8,118	4,393	5,412	6,358	6,077
Dodge	28,567	15,558	13,518	8,744	28,034	48,252	61,488	85,295	64,098	33,656	48,049	54,615	62,925
Federal	2,853	2,095	1,523	1,167	1,360	1,962	2,190	2,930	2,339	1,370	1,837	1,617	1,611
Ford	223,405	197,216	138,854	66,937	62,397	128,250	185,848	177,244	189,376	100,959	128,889	163,333	174,024
G. M. C.	14,248	9,004	6,919	6,359	6,602	10,449	11,442	26,980	43,522	20,152	34,908	42,486	45,703
Hudson	.....	.....	.....	.....	.....	.....	638	1,905	4,823	719	409	761	736
Indiana	.....	.....	.....	957	1,252	729	862	1,705	1,371	435	178	.....	.....
International	31,434	23,703	21,073	15,752	26,658	31,555	53,471	71,958	76,174	55,836	66,048	77,891	92,482
Mack	6,823	4,943	2,945	1,425	1,652	1,830	1,515	4,226	5,513	4,406	6,670	7,754	9,466
Plymouth	.....	.....	.....	.....	.....	.....	660	2,420	13,709	6,652	8,294	9,573	7,732
Reo	12,894	6,427	5,166	3,187	3,042	5,035	5,101	4,227	4,254	2,929	853	625	1,543
Sterling	1,577	1,244	739	227	108	134	174	277	311	267	326	341	400
Stewart	2,163	2,315	1,394	867	684	736	880	1,280	1,148	390	70	.....	.....
Studebaker	1,661	1,518	3,495	2,430	2,407†	1,697	2,100	3,279	5,129	2,000	2,110	1,207	5,078
White	6,121	4,395	2,561	2,138	1,384	3,963	3,304	5,757	5,933	3,514	4,558	7,344	9,271
Willys	6,536	4,264	3,131	1,132	233	25	2,280	2,441	1,122	1,889	1,634	2,291	2,031
All Others	16,819	11,107	7,050	4,290	4,035	3,970	2,901	3,480	3,861	3,383	3,187	3,466	4,015
Total	527,057	410,699	313,884	180,413	245,869	403,886	510,683	611,644	618,249	365,349	486,748	576,327	640,697

‡ Includes Indiana. † Includes Rockne. †† Does not include Federal government deliveries which are included in other years.
* Data from R. L. Polk & Co.

NEW TRUCK REGISTRATIONS BY STATES*

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941†
Alabama	10,456	6,186	3,536	1,982	4,054	8,051	9,925	13,187	12,874	7,041	11,978	12,928	15,260
Arizona	3,061	1,899	1,295	566	1,036	2,167	3,126	3,510	3,659	2,051	2,478	2,838	3,468
Arkansas	7,911	3,478	2,613	1,467	3,638	4,960	7,383	9,485	10,836	5,909	9,200	10,890	13,636
California	30,835	27,930	19,992	10,732	13,788	20,496	26,934	33,656	36,901	23,848	25,656	32,397	39,453
Colorado	6,382	5,840	3,887	2,001	2,488	5,196	6,086	9,060	8,411	4,771	5,935	6,308	6,502
Connecticut	7,828	5,928	5,540	3,056	4,246	6,124	7,318	8,240	7,767	4,422	5,466	6,888	7,735
Delaware	1,444	1,205	967	597	828	1,115	1,425	1,723	1,882	1,161	1,486	1,630	1,983
District of Col.	2,328	1,850	2,202	1,368	1,362	1,979	2,492	2,940	2,857	1,753	2,514	2,614	2,906
Florida	5,395	6,121	5,255	2,894	4,186	8,046	8,274	9,412	10,722	6,540	9,375	12,485	12,197
Georgia	6,768	4,998	4,779	2,544	5,260	7,921	10,887	12,941	12,998	6,818	11,702	15,468	15,742
Idaho	2,572	2,389	1,620	673	1,545	2,817	4,004	4,939	4,454	2,613	3,346	3,854	4,359
Illinois	26,584	20,037	14,788	7,863	11,764	17,584	23,046	31,123	30,451	18,055	25,353	29,535	31,692
Indiana	14,462	10,534	9,025	4,849	6,121	11,123	18,009	20,027	18,269	9,899	16,857	16,575	19,347
Iowa	11,445	10,038	7,899	4,154	5,449	9,860	12,754	12,999	12,449	8,940	12,245	13,790	14,585
Kansas	12,648	9,298	5,550	3,119	4,292	7,170	9,605	11,406	12,409	7,960	7,079	9,815	12,508
Kentucky	6,037	5,366	4,326	2,819	4,195	6,815	9,089	10,870	11,597	7,244	8,908	10,490	11,395
Louisiana	7,314	4,705	4,311	1,844	2,882	5,359	7,201	9,753	10,111	6,155	8,185	9,695	9,907
Maine	4,785	4,521	4,600	2,240	2,614	4,262	4,104	5,337	5,658	3,315	4,317	5,278	5,646
Maryland	7,055	6,038	4,864	2,953	3,818	5,457	6,657	7,382	7,783	4,741	6,307	8,054	9,138
Massachusetts	16,969	13,711	12,609	7,290	9,511	12,887	14,514	15,350	16,235	9,459	12,931	14,392	15,211
Michigan	25,585	15,818	10,722	6,402	9,085	16,281	21,104	24,840	24,549	11,268	17,704	21,622	22,186
Minnesota	11,282	10,292	7,580	4,658	5,722	9,255	12,740	14,144	13,555	8,674	10,528	12,566	13,103
Mississippi	6,977	5,518	2,137	1,476	2,752	5,414	6,573	10,367	11,176	5,826	8,472	10,604	10,408
Missouri	16,047	14,844	10,979	7,645	8,535	12,920	16,200	20,142	19,170	11,718	16,338	19,701	22,135
Montana	4,338	2,596	1,874	1,150	2,055	4,215	5,939	5,930	5,044	4,112	4,561	5,359	5,544
Nebraska	8,144	6,957	4,540	2,108	2,713	5,411	6,297	6,996	6,202	4,664	5,449	6,146	7,754
Nevada	934	635	648	320	233	638	1,006	1,210	1,167	731	876	1,133	1,130
New Hampshire	2,491	2,290	2,038	1,152	1,783	2,731	2,490	3,196	3,022	1,759	2,748	3,012	2,879
New Jersey	17,587	14,764	13,051	7,505	7,401	11,444	13,165	16,935	18,446	11,591	12,725	14,710	16,909
New Mexico	2,157	2,006	1,560	817	1,395	3,150	4,058	4,545	5,089	2,911	3,732	4,119	4,093
New York	46,984	38,951	32,792	19,943	20,200	30,383	35,805	39,159	41,922	26,656	32,109	35,721	36,203
North Carolina	9,618	6,483	6,821	3,620	6,597	11,185	13,835	14,286	15,691	9,309	12,867	14,750	16,078
North Dakota	4,144	2,419	1,436	786	1,107	2,389	3,144	2,680	3,193	2,463	2,740	3,790	4,671
Ohio	27,338	20,111	14,291	8,753	11,150	20,487	22,772	30,028	28,440	15,261	22,536	26,509	30,389
Oklahoma	12,937	8,112	4,060	2,594	4,941	8,944	11,768	14,737	14,702	8,956	10,198	11,484	13,844
Oregon	5,819	4,193	3,099	1,451	2,488	3,780	5,964	8,050	7,859	4,064	5,873	7,212	8,973
Pennsylvania	37,258	30,120	23,396	15,618	19,991	29,891	32,097	41,919	39,150	21,044	28,915	38,107	38,426
Rhode Island	2,953	2,116	2,027	1,152	1,598	2,035	2,088	2,594	2,749	1,531	2,283	2,664	3,039
South Carolina	4,760	3,709	2,959	1,213	2,604	4,228	5,481	6,091	7,257	4,305	6,431	7,634	7,978
South Dakota	4,160	3,093	1,673	704	996	2,252	3,020	2,962	2,659	2,003	2,752	3,407	3,538
Tennessee	5,851	5,087	3,285	2,031	3,623	6,366	9,518	11,062	10,799	6,476	9,732	12,797	13,901
Texas	33,381	22,237	15,742	8,819	13,889	24,854	32,437	38,903	40,905	25,882	33,426	38,599	44,296
Utah	2,610	2,218	1,591	758	1,568	2,530	3,498	3,571	3,298	1,984	3,034	3,095	3,256
Vermont	2,027	1,670	1,339	972	1,311	2,048	2,394	2,308	2,444	1,228	2,076	2,325	2,867
Virginia	9,989	8,917	6,823	4,105	5,667	8,508	11,402	12,904	12,928	7,906	10,391	12,748	15,938
Washington	8,325	6,680	4,640	2,471	4,002	6,199	9,076	10,666	10,222	5,416	7,149	9,306	10,672
West Virginia	5,299	4,551	3,552	1,844	2,988	5,847	6,646	9,181	9,269	4,694	6,604	7,800	8,570
Wisconsin	14,393	12,058	8,399	4,522	5,411	9,313	13,118	16,237	16,412	8,516	10,949	13,051	14,744
Wyoming	1,481	1,182	1,174	613	937	1,799	2,208	2,661	2,627	1,708	2,232	2,432	2,503
Total	527,057	410,699	313,884	180,413	245,869	403,886	510,683	611,644	618,249	365,349	486,748	576,327	640,697

* Data from R. L. Polk & Co. † Does not include Federal deliveries which are included in other years.

VITAL STATISTICS OF THE TRUCK INDUSTRY

U. S. NEW TRUCK REGISTRATIONS BY MONTHS, BY YEARS

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941††	
January	29,900	30,236	24,415	14,776	11,709	22,903	34,759	43,760	47,618	31,995	37,715	45,650	50,830	January
February	32,637	31,880	23,466	14,558	9,707	24,476	34,797	40,301	41,843	27,551	34,102	41,336	50,124	February
March	46,368	42,199	30,609	16,674	9,934	33,884	41,511	52,428	60,301	37,255	45,083	63,093	62,413	March
April	56,299	47,029	36,848	17,784	17,301	38,882	46,785	64,956	67,832	35,682	46,063	55,982	64,236	April
May	52,874	43,286	33,496	18,696	20,925	39,831	47,968	62,183	65,857	32,937	45,381	51,553	64,177	May
June	45,114	33,531	28,496	17,876	23,254	34,768	48,243	56,851	58,626	30,647	40,482	43,504	62,265	June
July	57,943	39,904	30,102	14,731	30,642	37,490	51,243	63,695	61,686	33,475	44,747	50,913	67,412	July
August	52,557	33,787	27,070	15,081	28,799	40,790	50,355	59,222	60,872	34,231	43,523	48,980	56,191	August
September	46,560	33,933	25,967	14,967	31,269	37,225	41,390	54,611	54,711	26,570	32,983	39,224	43,892	September
October	49,899	34,237	24,685	15,156	28,058	40,878	37,439	41,220	40,246	19,589	37,923	48,356	41,352	October
November	33,631	22,012	15,553	10,392	18,691	28,689	36,935	30,255	27,248	23,943	41,286	46,618	36,799	November
December	23,275	18,685	13,177	9,522	15,580	24,070	39,258	42,162	31,409	31,474	37,480	51,095	41,006	December
Total	527,057	410,099	313,884	190,413	245,889	403,886	510,683	611,644	618,249	385,349	486,748	†576,327	640,697	Total

† Contains 23 delinquent registrations which cannot be assigned to any one month. ††Does not include Federal Government deliveries which are included in other years.

TOTAL TRUCK REGISTRATIONS BY STATES

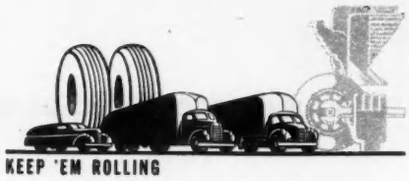
	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
Alabama	37,832	37,976	33,972	31,575	29,838	34,101	38,989	44,272	53,070	50,780	54,947	58,707	65,909
Arizona	10,686	12,045	12,633	14,687	14,569	16,791	17,964	20,183	22,973	22,998	24,083	25,243	28,450
Arkansas	39,732	26,986	31,275	22,989	32,980	35,700	40,107	50,131	59,263	53,789	60,535	66,158	82,000
California	214,033	230,837	245,213	234,177	220,087	237,568	253,906	*‡266,379	*‡284,132	*‡300,483	*‡309,855	*‡326,998	*‡350,261
Colorado	28,501	31,662	32,082	30,357	27,433	27,856	28,430	*31,930	32,795	31,447	30,636	30,298	31,044
Connecticut	50,006	51,196	52,227	51,388	52,564	55,878	62,232	60,653	68,070	63,910	66,273	74,456	80,621
Delaware	10,232	10,576	*9,991	*8,686	*8,485	*9,394	*9,692	*10,010	*10,314	*10,519	*11,248	*11,030	*13,969
District of Columbia	15,995	16,943	18,185	18,286	16,742	17,263	17,610	19,397	18,862	14,267	13,718	13,928	13,571
Florida	57,293	53,096	51,724	37,955	45,019	55,359	57,199	65,738	70,308	71,871	76,320	79,790	87,706
Georgia	48,543	47,119	46,284	42,050	51,212	60,262	66,079	73,289	78,803	76,154	85,520	91,321	99,506
Idaho	13,676	14,551	15,435	14,030	14,884	17,861	21,371	25,852	28,208	27,809	31,380	33,538	36,515
Illinois	*203,335	207,584	201,509	177,820	*186,186	*174,265	*185,477	*208,926	*220,639	*222,582	*232,888	*228,889	*234,703
Indiana	125,349	128,397	129,826	122,019	116,361	122,791	132,767	131,767	140,292	122,168	129,695	134,215	135,834
Iowa	69,531	72,190	78,414	74,882	69,490	75,350	80,529	82,840	88,636	*92,884	*93,139	*101,244	*108,985
Kansas	*73,694	*83,139	*80,484	*71,778	*72,404	75,565	*80,068	*87,113	*93,046	*97,744	*98,616	102,665	113,872
Kentucky	34,132	35,841	34,969	31,621	32,111	37,445	43,613	51,840	59,341	63,373	69,629	75,891	82,000
Louisiana	46,303	44,697	47,783	41,853	42,007	44,779	59,398	76,251	80,630	80,167	84,475	81,793	93,305
Maine	36,544	37,435	38,771	38,203	35,271	37,693	38,079	39,276	43,171	42,663	41,673	43,914	43,200
Maryland	38,839	37,832	36,080	41,529	34,728	45,351	48,528	53,398	52,014	53,926	58,027	59,160	62,428
Massachusetts	98,268	102,918	103,888	102,959	99,854	98,508	100,411	102,400	104,316	104,134	106,624	109,462	110,650
Michigan	*175,944	*167,158	*152,635	*123,273	*121,639	*123,405	*127,283	*139,520	*146,117	*113,631	*90,796	*117,500	*129,589
Minnesota	99,696	108,070	108,435	101,650	99,130	103,882	105,861	114,448	117,632	115,970	118,227	124,602	129,710
Mississippi	32,649	33,651	*30,721	*25,164	32,924	34,115	33,306	43,357	53,072	51,486	57,097	60,927	64,119
Missouri	85,443	*91,455	*95,975	*29,265	*103,795	107,709	115,819	*128,425	*134,457	*133,666	*141,609	*152,924	*164,546
Montana	25,102	25,619	*24,037	*20,521	*27,480	*31,087	*35,542	*39,311	*40,081	*41,138	*44,480	*47,964	*51,476
Nebraska	42,260	58,642	59,848	52,294	53,947	56,560	59,054	62,133	63,667	66,988	65,632	68,016	71,283
Nevada	6,613	6,257	6,950	6,527	5,927	6,391	6,875	*7,680	*8,092	*7,525	5,811	6,571	6,843
New Hampshire	13,980	19,028	18,671	17,378	19,872	22,382	23,455	*22,023	23,768	*23,597	*24,964	30,062	26,216
New Jersey	133,373	133,154	133,361	128,604	122,228	123,351	124,866	130,642	134,458	132,714	132,819	137,126	140,088
New Mexico	2,374	†13,700	15,884	15,020	15,290	16,112	18,245	22,731	31,117	26,915	28,488	30,090	30,806
New York	341,191	340,749	330,813	313,765	298,508	298,379	306,919	326,404	333,543	327,474	350,693	363,110	348,819
North Carolina	52,951	56,108	54,575	50,262	49,680	54,766	57,931	65,000	73,383	74,211	81,068	87,457	96,320
North Dakota	25,954	27,636	26,588	23,590	*25,342	26,315	28,780	29,650	32,084	33,061	34,544	37,019	40,788
Ohio	206,432	204,270	*191,929	167,492	*158,189	*159,845	*170,954	*172,273	*180,484	*177,314	*184,223	*190,654	*192,000
Oklahoma	60,390	59,384	54,585	44,884	65,957	73,928	82,855	90,638	98,675	92,943	98,172	103,391	107,903
Oregon	21,876	22,437	22,950	34,477	32,206	41,411	42,584	49,746	60,660	59,829	62,749	67,756	75,538
Pennsylvania	217,408	218,687	219,812	216,334	219,497	215,016	229,026	249,637	257,330	255,654	269,062	263,112	274,967
Rhode Island	19,999	19,631	19,565	18,416	17,965	18,332	18,428	19,458	19,768	20,010	19,699	20,743	21,174
South Carolina	25,591	26,261	23,439	19,722	17,795	20,877	29,761	33,525	39,835	41,379	44,142	39,070	50,638
South Dakota	*22,780	24,977	33,516	19,542	22,764	23,832	26,931	28,172	28,768	28,494	30,282	32,298	34,952
Tennessee	*32,734	37,823	33,976	31,434	33,848	37,755	42,031	49,368	55,736	61,724	67,053	70,667	81,022
Texas	182,957	206,757	210,991	191,462	188,676	226,276	257,055	285,839	294,639	316,757	335,467	350,208	368,863
Utah	17,000	17,869	17,577	16,096	16,348	17,103	17,587	22,000	21,094	22,432	25,209	23,584	24,208
Vermont	8,559	8,226	8,453	8,309	7,924	8,612	9,031	8,682	9,029	9,042	9,576	9,628	10,327
Virginia	58,680	57,307	56,633	62,344	57,266	57,268	60,376	57,689	67,547	66,410	68,723	74,720	83,594
Washington	62,346	63,188	60,082	63,826	62,548	64,321	68,657	79,500	84,577	83,204	85,494	93,395	99,100
West Virginia	40,173	40,373	39,359	32,916	33,415	27,253	29,305	36,908	44,558	43,785	48,289	51,520	49,541
Wisconsin	104,055	105,110	113,773	108,047	104,347	120,180	130,144	150,779	145,822	135,413	141,590	147,661	158,087
Wyoming	8,800	9,922	10,713	9,879	10,643	13,102	14,593	15,592	17,368	17,589	18,090	19,062	20,474
TOTALS	3,379,854	3,486,019	3,466,571	3,229,315	3,227,357	3,409,335	3,655,705	3,981,755	4,107,244	4,184,109	4,363,329	4,569,537	4,827,520

* Includes buses. † Large increase due to reclassification of trucks previously carried as passenger cars. ‡ Includes light commercial vehicles registered as passenger cars

TOTAL U. S. TRUCK REGISTRATIONS BY YEARS (1904-1941)

		% Gain			% Gain			% Gain			% Gain			% Gain
1904	410	...	1912	41,400	107	1920	1,006,082	27	1928	3,113,999	7	1935	3,655,705	7.1
1905	600	46	1913	63,800	54	1921	1,117,100	11	1929	3,379,854	8	1936	3,981,755	9.1
1906	1,100	83	1914	85,600	34	1922	1,375,725	23	1930	3,486,019	3	1937	4,107,244	3.1
1907	1,700	55	1915	136,000	59	1923	1,612,569	17	1931	3,466,571	−.6	1938	4,184,109	2.0
1908	3,100	82	1916	215,000	58	1924	2,134,724	32	1932	3,229,315	−.7	1939	4,363,329	4.3
1909	6,050	95	1917	326,000	52	1925	2,440,854	14	1933	3,227,357	−0.6	1940	4,569,537	4.8
1910	10,000	65	1918	525,000	61	1926	2,764,222	13	1934	3,409,335	5.5	1941	4,827,520	5.8
1911	20,000	100	1919	794,372	51	1927	2,914,019	5						

RATIONING PLANS



FOR TRUCKS AND TIRES

TRUCKS...

DETAILS OF RATIONING PLAN

The War Production Board has ordered the rationing of light, medium and heavy trucks, truck-tractors and trailers through its General Conservation Order M-100.

The Office of Defense Transportation will administer the rationing through the 79 field offices of the Bureau of Motor Carriers, Interstate Commerce Commission.

The director of the Office of Defense Transportation is Joseph B. Eastman. The director of the ODT Motor Transport Division is Commissioner John L. Rogers, of the Interstate Commerce Commission. The Director of Allocations is H. H. Kelly.

Each field office of the Bureau of Motor Carriers will be a Local Allocation Office. These offices are in charge of district directors and district supervisors. The Local Allocation Office will be the first to consider applications and will have to power to approve or disapprove.

Local Appeal Boards—established in such number as the Office of Defense Transportation deems necessary—will have the power to consider appeals in the event an application is disapproved by a Local Allocation Office. It may reverse a decision of the LAO. Local Appeal Boards will be made up of three men each.

A total of 100,000 new light, medium and heavy trucks and truck-tractors will be available for rationing this year.

A new commercial vehicle is defined as any light, medium or heavy truck, truck-tractor or trailer manufactured for civilian use after July 31, 1941, and which either has been driven less than 1000 miles or, irrespective of mileage driven, has not been transferred except to a sales agency for th purpose of resale. This is taken to mean that if an operator wishes to dispose of a vehicle manufactured after July 31 and which has not been driven 1000 miles he can dispose of it only to a sales agency for the rationing pool.

A person wishing to procure a new commercial vehicle must file his application on Form PD-310, copies of which may be obtained from the sales agency handling the make of vehicle desired by the applicant. The applicant is urged not to file an application unless it can be clearly shown:

a. That the applicant's needs cannot be filled by leasing the equipment from others.

b. That the applicant's needs cannot be filled by pooling present equipment with that of others.

c. That the applicant cannot transfer some of the present equipment now being used for less essential purposes to the use for which a new vehicle is now being requested.

d. That if the vehicle is to be used for replacement, the replaced vehicle is incapable of being repaired to serve the applicant's purpose.

USAGE CLASSIFICATION LIST FOR COMMERCIAL MOTOR VEHICLES

Schedule A to General Conservation Order M-100

The following classification of commercial motor vehicles on the basis of use applies to light, medium and heavy trucks, truck-tractors, trailers, and chassis thereof. It will serve as a broad general basis for the preferential allocation of the supply of such new vehicles. The various classes are arranged in the order of their importance from the standpoint of the national war effort. Individual groups within a given class are shown as illustrations of the coverage of the class and do not indicate preference groups within the class.

All vehicles are to be classified according to their predominant or principal use into five classes arranged in the order in which preference is to be granted. As a general rule, predominant or principal use means 50 per cent or more of the applicant's operations.

The Usage Classification List, which covers civilian transportation only, is as follows:

CLASS I

Vehicles principally used in connection with military forces (in action or on maneuvers), public health or safety, or with essential channels of communication, such as

In connection with military forces in the field (in action or on maneuvers).

To maintain public police services; fire-fighting services; services essential to protection of public health and safety, including the regulation of highway traffic and prevention of highway accidents.

To construct and maintain mail, telegraph, telephone and organized radio communication services.

To furnish and maintain water supply, sewage and garbage disposal and other sanitation services.

CLASS II

Vehicles principally used directly in connection with the war effort, such as

In connection with fixed military and naval posts and establishments.

In the transportation of all materials, supplies and equipment of industry and business directly connected with the war effort, including farm and forest products, and food.

In service operations connected with the construction, maintenance and supply of essential rail, highway, water, pipe line, and air transportation facilities.

Transportation of material and equipment for construction of defense housing facilities.

In the transportation of material and equipment for the construction and maintenance of public utilities other than those specified in Class I above.

In the transportation of persons engaged in business, industry, etc., directly connected with the war effort.

CLASS III

Vehicles principally used in connection with essential functions indirectly connected with the war effort, such as

In the transportation of all materials, supplies and equipment of industry and business indirectly connected with the war effort, including farm and forest products, and food.

For the transportation of ice, and fuel for heating and power to the ultimate consumer for personal family or household use.

For the rendering of essential roofing, plumbing, heating, electrical, building and vehicle repair services.

For the collection of waste and scrap material other than services performed in connection with Class I.

In the transportation of persons in business, industry, etc., indirectly connected with the war effort.

In the service of public and private schools and educational institutions.

CLASS IV

Vehicles used for the transportation of persons or goods, except as above classified, not connected with the war effort, and which are used in the less essential activities.

This includes all essential forms of retail delivery, except that of ice and fuel (See Class III).

CLASS V

Vehicles used in connection with non-essential functions of so-called "luxury" uses and not connected with the war effort.

CONTINUED ON NEXT PAGE

(CONTINUED FROM PRECEDING PAGE)

RATIONING PLANS FOR TIRES...

OUTLINE OF TRUCK PROCEDURE

The procedure for obtaining a new commercial vehicle is as follows:

1. The applicant desiring to acquire a new commercial vehicle first approaches a sales agency that handles the make and type of equipment which he desires to purchase. This sales agency will have all the necessary forms and instructions for filling them out. This material will be furnished the sales agency by the vehicle manufacturer.

2. The sales agency will aid the applicant in determining in what Usage Classification he falls, and aid also in filling out the application form.

3. Three copies of the application form must be filled out and the original notarized. The applicant retains one and mails the other two copies to the Local Allocation Office of the Office of Defense Transportation.

4. The Local Allocation Office will study the application, determine if the classification is correct and render a decision.

5. If the application is approved, the Local Allocation Office sends the notarized copy of the application to the Office of Defense Transportation in Washington, D. C., with the recommendation that the applicant's request be granted.

6. The Office of Defense Transportation will review the application and, if everything is in order, will transmit it to the War Production Board. If it is approved by the War Production Board a Certificate of Transfer PD321 is issued to the applicant in duplicate by the Director of the Division of Industry Operations. The applicant gives the original of the certificate to the sales agency and keeps the copy.

7. The applicant presents his Certificate of Transfer at the sales agency and makes arrangements to complete the transfer.

8. Attached to the Certificate of Transfer is a post card which the applicant signs and which the sales agency fills out and returns to the War Production Board, Washington, D. C., upon delivery of the vehicle.

9. If the Local Allocation Office disapproves the application, the applicant has three courses open to him. He can drop the matter, he can file again at the expiration of a three-month waiting period or he can make an appeal to the Local Appeal Board. He makes his appeal in writing within 30 days after the decision of disapproval.

10. The Local Appeal Board will review the appeal and either approve or disapprove the application. If approved, the application goes through the ODT and WPB channels previously indicated. If disapproved, the applicant can file again after three months' time.

If application is being made for more than one vehicle, a form must be filled out in triplicate for each such vehicle.

Under no circumstances should the application form or forms be sent first to Washington, D. C. They should be mailed to the Local Allocation Office.

Violations in the form of misstatements or falsifications on the application form will be punishable under the Criminal Code of the U. S. and may bar an operator from getting vehicles or any other material which hereafter may be subject to allocation for the duration.

Below is a list of allocation offices:

LOCAL ALLOCATION OFFICES

(Address mail c/o Bureau of Motor Carriers, I.C.C.)

ALABAMA, Birmingham, 1002 Martin Bldg.
ARIZONA, Phoenix, 304 Security Bldg.
ARKANSAS, Fort Smith, 31 Court House Bldg.
  Little Rock, 153 U. S. Court House
CALIFORNIA, Los Angeles, 1519 U. S. Court House.
  San Francisco, 541 Monadnock Building.
COLORADO, Denver, 622 Midland Savings Bldg.
CONNECTICUT, Hartford, 202 Essex Bldg.
DELAWARE, Use Philadelphia Office
DIST. OF COL., Use Baltimore Office
FLORIDA, Jacksonville, 225 Post Office Bldg.
  Tallahassee, 305 Tallahassee Administration Bldg.
GEORGIA, Atlanta, 809 Standard Bldg.
IDAHO, Boise, 619 Idaho Bldg.
ILLINOIS, Chicago, 826 U. S. Court House.
  Springfield, 902 First National Bank Bldg.
INDIANA, Indianapolis, 257 U. S. Court House.
  Fort Wayne, 359 Federal Bldg.
IOWA, Davenport, 615 Kahl Bldg.
  Des Moines, 221 Federal Office Bldg.
KANSAS, Topeka, 309 Federal Bldg.
  Wichita, 502 Post Office Bldg.
KENTUCKY, Lexington, 5 Post Office Bldg.
  Louisville, 645 Post Office Bldg.
LOUISIANA, New Orleans, 633 Federal Bldg.
  Shreveport, 430 Ricou-Brewster Bldg.
MAINE, Portland, 409 Clapp Memorial Bldg.
MARYLAND, Baltimore, 401 Appraisers Store Bldg.
  Salisbury, 206-B Post Office Bldg.
MASSACHUSETTS, Boston, 38 Chauncy St.
  Springfield, 426 Federal Bldg.
MICHIGAN, Detroit, 238 Federal Bldg.
  Lansing, 1608 Olds Tower Bldg.
MINNESOTA, Minneapolis, 107 Federal Office Bldg.
MISSISSIPPI, Jackson, 811 Deposit Guaranty Bank Bldg.
MISSOURI, Kansas City, 912 Baltimore Ave.
  St. Louis, 920 Boatmen's Bank Bldg.
MONTANA, Billings, 413 Electric Bldg.
NEBRASKA, Lincoln, 318 U. S. Court House.
  Omaha, 802 Woodman of the World Bldg.
NEVADA, Use San Francisco Office
NEW HAMPSHIRE, Lebanon, 6 Campbell St.
NEW JERSEY, Trenton, 410 Post Office Bldg.
NEW MEXICO, Albuquerque, 401 Sunshine Bldg.
NEW YORK, Albany, 417 Federal Bldg.
  Binghamton, 711 Klimer Press Bldg.
  Buffalo, 1501 Genesee Bldg.
  New York, Federal Bldg., 641 Washington St.
  Syracuse, 379 Federal Bldg.
NORTH CAROLINA, Charlotte, 240 Post Office Bldg.
  Raleigh, 307 Post Office Bldg.
NORTH DAKOTA, Fargo, 404 First National Bank Bldg.
OHIO, Cincinnati, 413 New Federal Bldg.
  Cleveland, 519 Federal Bldg.
  Columbus, 311 Old Post Office Bldg.
  Toledo, Third Floor Old Federal Bldg.
OKLAHOMA, Oklahoma City, 336 Key Bldg.
  Tulsa, 516 Wright Bldg.
OREGON, Portland, 323 Pittock Block.
PENNSYLVANIA, Harrisburg, Room 504, 600 N. Second St.
  Philadelphia, 1101 Gimbel Bldg.
  Pittsburgh, 1025 New Federal Bldg.
  Scranton, 329 U. S. Post Office Bldg.
RHODE ISLAND, Providence, 508 Palmer Bldg.
SOUTH CAROLINA, Columbia, 116 U. S. Court House.
SOUTH DAKOTA, Pierre, 301 Post Office Bldg.
TENNESSEE, Memphis, 207 Post Office Bldg.
  Nashville, 222 U. S. Court House.
TEXAS, Dallas, 533 Federal Bldg.
  El Paso, 103 Federal Bldg.
  Fort Worth, 1109 Electric Bldg.
  Houston, 614 New Federal Bldg.
  San Antonio, 205 U. S. Post Office Bldg.
UTAH, Salt Lake City, 420 Continental Bank Bldg.
VERMONT, Use New Hampshire Office
VIRGINIA, Richmond, 608 Parcel Post Bldg.
  Roanoke, 206 Liberty Trust Bldg.
WASHINGTON, Seattle, 714½ U. S. Court House.
  Spokane, 206 Post Office Bldg.
WEST VIRGINIA, Charleston, 417 Peoples Bank Bldg.
  Wheeling, 740 National Exchange Bank Bldg.
WISCONSIN, Madison, 504 Cantwell Bldg.
  Milwaukee, 828 N. Broadway.
WYOMING, Use Denver, Col. Office

DETAILS OF PLAN

New and retread tire rationing which became effective Feb. 19 is being administered by the Office of Price Administration through State Administrators and Local Rationing Boards consisting of three persons selected by local Defense Councils and appointed by the OPA.

Each LRB has jurisdiction over all vehicles garaged or stationed in the area in which it has been designated to serve.

Two eligibility lists, designated A and B, are contained in the regulations. List A is confined to "essential" users. List B is confined exclusively to vehicles eligible to apply for certificates for retreaded or recapped tires. List B truck-tire certificates will be issued only during the last several days of each month and then only if any retreads are left over after the demands of List A truck eligibles have been satisfied.

List B eligibility classifications are confined to passenger car users, excepting for a single classification, "Trucks used for any important purpose, not included in List A." The importance of the truck will be determined in each case by the local board in relation to the needs of the community.

The eligible classes in List B are not automatically qualified to purchase retreaded or recapped tires. The regulations require anyone on List B to establish to the satisfaction of the local board that his car is used exclusively on service essential to the community and to the Nation.

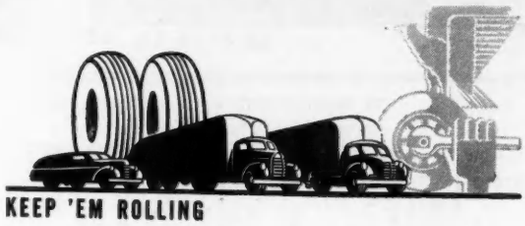
It is provided that only "new tire" certificates will be issued to List A passenger cars unless the "new tire" quota is exhausted, in which event a "retread" certificate will be issued if there is any passenger car camelback available.

Truck tire eligibles in List A will not be given certificates to purchase any new tires unless their old tires cannot be retreaded. However, the needs of List A truck eligibles must be satisfied in every case ahead of those of a truck on List B.

As is the case with "new tire" purchase certificates, the "retread" certificates are good for 30 days and can be exercised anywhere. If desired, a certificate holder either can buy a retreaded or recapped tire or have a worn tire retreaded or recapped. Any tire, replaced by a new or retreaded tire, assuming no "carcass" was provided, must be turned in.

No certificates for List B truck retreads will be issued until the 25th of each month

TRUCKS AND TIRES



KEEP 'EM ROLLING

and then only during the remaining days of that month. Applications for such certificates can be filed between the first and 20th of each month. No applications will be accepted after the latter date until the first of the following month.

ELIGIBILITY LIST FOR NEW AND RETREAD TIRES

Order No. M 15-C

LIST A

The following vehicles shall be eligible for tires or tubes to the extent, and only to the extent provided by Chapter 4 of the Tire Rationing Regulations which defines permitted and prohibited transfers and deliveries to users.

(a) A vehicle which is operated by a physician, surgeon, visiting nurse, or a farm veterinary, and which is used principally for professional services;

(b) A vehicle which is operated by a regularly practicing minister of any religious faith and which is used principally in and is necessary to the performance of his religious duties;

(c) An ambulance;

(d) A vehicle used exclusively for one or more of the following purposes:

(1) To maintain fire-fighting services;

(2) To maintain necessary public police services;

(3) To enforce such laws as relate specifically to the protection of public health and safety;

(4) To maintain garbage disposal and other sanitation services;

(5) To maintain mail services;

(e) A vehicle with a capacity of 10 or more passengers operated exclusively for one or more of the following purposes:

(1) Transportation of passengers as part of the services rendered to the public by a regular transportation system;

(2) Transportation of students and teachers to and from school;

(3) Transportation of employees to or from any industrial or extractive establishment, power generation or transmission facilities, transportation or communication facilities, construction project, or farm, except when public transportation facilities are readily available;

(f) A truck operated exclusively for one or more of the purposes stated in the preceding sections or for one or more of the following purposes:

(1) Transportation of ice and fuel;

(2) Transportation of materials and equipment for construction or for mechanical, structural, or highway maintenance or repair;

(3) Transportation by any common carrier;

(4) Transportation of waste and scrap materials;

(5) Transportation of raw materials, semi-manufactured goods, and finished products, including farm products and foods: Provided, That no certificates shall be issued under this paragraph for a tire or tube to be mounted on a truck used for transportation of commodities to the ultimate consumer for personal, family, or household use;

(g) Farm tractors or other farm implements other than automobiles or trucks, for the operation of which rubber tires or tubes are essential;

(h) Industrial, mining, and construction equipment, other than automobiles or trucks, for the operation of which rubber tires or tubes are essential.

LIST B

The following vehicle shall be eligible for tires or tubes to the extent, and only to the extent provided by Chapter 5 of the Tire Rationing Regulations which defines the rulings regarding retread tires and new tires of an obsolete type for vehicles eligible under List B.

(a) A passenger car used principally to provide one or more of the following transportation services:

(1) Licensed jitney, taxi, or similar transportation service to the general public;

(2) Transportation of persons to enable them to render construction or mechanical, structural, or highway repair maintenance services;

(3) Transportation of executives, engineers, technicians, and workers to and from, or within, such of the following as are essential to the war effort: power generation or transmission facilities, transportation or communication facilities, or agricultural, extractive, industrial, military or naval establishments;

(4) Transportation on official business of Federal, State, or local government employees engaged in the performance of government functions essential to the public health, safety, or the war effort;

(5) Transportation of produce and supplies to and from the farm if an applicant operating such farm does not own or possess a truck or other practicable means of transportation;

(6) Transportation of traveling salesmen who are engaged in the sale of farm, extractive, or industrial equipment, foods or medical supplies, the distribution of which is essential to the war effort;

(7) Transportation of newspapers for wholesale delivery: provided, that a passenger automobile to be eligible under this paragraph must be used exclusively for one or more of the purposes in this subsection (a);

(b) Trucks used for any important purpose not included in List A.

OUTLINE OF TIRE PROCEDURE

The procedure for obtaining a new or retreaded tire is as follows:

1. An applicant desiring a new tire and/or new tube and who believes that his vehicle comes within one of the classifications set forth in List A or List B may file with the LRB an application for authority to purchase a new tire or tube or a retread.

2. The applications are available from Local Boards and consist of two parts, Form R1 and Form R1A. A single copy of each must be filled out for each vehicle for which a tire or tires are being requested.

3. If the applicant has tires which can be retreaded or recapped for use at speeds at which he normally operates, he may apply for only retreaded or recapped tires.

4. Applicants eligible for recapped tires according to List A may file at any time. Applicants who believe they are eligible under List B must file between the first and 20th of the month if that application is to be considered in the next allotment period.

5. The application is filed with the Local Rationing Board which will then consider the application and applicant's eligibility.

6. If the Local Board approves the application, it issues a Purchase Certificate to the applicant on Form R-2 for new tires and tubes and Form R-8 for recaps.

7. The Purchase Certificate is composed of four parts, each bearing the same serial number. The dealer from whom the new tire or tube or recap is purchased retains one part for his file, the second part is used by him to replenish his stock, the third goes to the Board which issued the certificate, and the fourth goes to the applicant.

8. The applicant must make his purchase within 30 days from the date of issue of the certificate from any authorized seller. He must turn in his old tire or tube at the time of the purchase of the new equipment.

9. If the applicant has no old tire or tube due to their theft, etc., he must establish this fact to the satisfaction of his Board.

10. If the tire or tube is purchased from a mail order house, the applicant must sell the old tire and tube himself within five days of receiving the new replacements. Sale must be to an authorized tire dealer and the applicant then files Form R-3 with his Board.

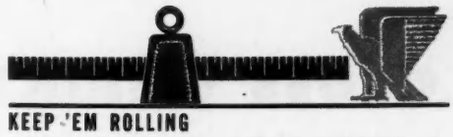
11. If the application has been denied by the Local Board, the applicant may file an appeal with the State Rationing Administrator within 30 days of the denial of his application.

12. If the State Administrator approves the application, it is returned to the Local Board with instructions to issue a Purchase Certificate to the applicant. If the appeal is denied, the applicant can act on the appeal within 30 days by filing a written petition with the Office of Price Administration, Washington, D. C.

STATE SIZE AND

STATE	SIZE RESTRICTIONS (K)							GROSS WEIGHT (LEGAL LIMITS)		PRACTICAL GROSS WEIGHT LIMITS (K) (See NOTE) (In thousands of pounds) (Where No Distinction is Made Between Pneumatic and Solid Tire Limits, Below Limits Apply to Both)												
	Width (In Inches)	Height (In Feet)	LENGTH: Single Unit	LENGTH: Tractor Semi-Trailer	LENGTH: Other Combinations	Number of Trailers (Semi-Trailer = ½)	Minimum Tandem Axle Spacing	Per Inch of Tire Width	Per Axle (1000 lb.)	4-Wheel Single Unit	6-Wheel Single Unit	4-Wh. Tractor 2-Wh. Semi-T.	4-Wh. Tractor 4-Wh. Semi-T.	6-Wh. Tractor 4-Wh. Semi-T.	4-Wh. Truck 4-Wh. Trailer	4-Wh. Truck 6-Wh. Trailer	6-Wh. Truck 4-Wh. Trailer	6-Wh. Truck 6-Wh. Trailer	4-Wh. Tractor 2-Wh. Semi-T. 4-Wh. Trailer	4-Wh. Tractor 4-Wh. Semi-T. 4-Wh. Trailer	6-Wh. Tractor 4-Wh. Semi-T. 6-Wh. Trailer
Ala. TV	96	12½	30	40	NP	½	NS	600	16	30	30	30	30	30	NP	NP	NP	NP	NP	NP	NP
Ariz.	96	14½	35	65	65	1½	NS	700-P 500-S	18	22	34	40	44	56	44	56	56	68	62	66	90
Ark. VXZ	96	12½	35	45	45	1 or ½	40	Table	16	32	46.9-IW	53.9-IW	53.9-IW	53.9-IW	53.9-IW	53.9-IW	53.9-IW	53.9-IW	NP	NP	NP
Cal. XZ	96	13½	35	60	60	NR	NS	NS-P 600-S	18	36	53.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
Colo. X	96 102 b	12½	35	40	50	1½	40	NS-P 500-S	18-I 16-J	24	34	50.4	50.4	50.4	48	58	58	63	63	63	63
Conn. TZ	96 c 102	12½	40	40	NP	½	NS	NS-P 800-S	NS(Z)	32-P 26-S	40-P 26-S	40-P 26-S	40-P 26-S	40-P 26-S	NP	NP	NP	NP	NP	NP	NP
Del. Z	96	12½	33	60	60	1½	NS	700	18-P 16-S	26-P 22-S	36-PN 22-S	40-P 38-S	40-P 38-S	40-P 38-S	48-P 44-S	48-P 44-S	58-P 44-S	58-P 44-S	62-P 60-S	62-P 60-S	62-P 60-S
D. C. VZ	106 a 96	12½	33	33	50	NR	40	880	24.6 15.4 s	30.8-P	39.6-P	39.6-P	39.6-P	39.6-P	61.6-P	70.4-P	70.4-P	79.2-P	70.4-P	70.4-P	79.2-P
Fla. Z	84	12	35	45	45	1 or ½	NS	550	16	16-PQ 8-S	16-PQ 8-S	19-PQ 9.5-S	40-PQ 11-S	40-PQ 11-S	40-PQ 11-S	40-PQ 11-S	40-PQ 11-S	40-PQ 11-S	NP	NP	NP
Ga. X	96	13½	35	45	45	1 or ½	40	NS	18-I 16-J	38	46.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9
Idaho V[2]	96	14	35	45	65	1½	NS	800 [0]	18	28	42	42	56	60	56	68	68	68	68	68	68
Illinois TV[1z]	96	NS	35	35	40	1½	40	800	16	24 E	40	40	40	40	56	56	72	72	72	72	72
Indiana X	96	12	36	40	40	1½	40	800	18	36	47.6	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4
Iowa TX	96	12	33	45	NP	½	40	NS	16-P 14-S	32-PW 28-S	35.2	40.6	40.6	40.6	NP	NP	NP	NP	NP	NP	NP
Kansas X	96	12½	35	35	45	1 or ½	40	NS	18-I 16-J	24 28 t	34	46.9	46.9	46.9	48	58	58	63	NP	NP	NP
Ky. TZ	96	11½	26½	30	NP	½	NS	600	NR	18	18	18	18	18	NP	NP	NP	NP	NP	NP	NP
La.	96	12½	33	45	45	1 or ½	40	600	18-I 16-J	12PL	20PL	20PL	24PL	24PL	20PL	20PL	32PL	32PL	NP	NP	NP
Maine	96	12½	40 h	40 h	40 h	1 or ½	NS	600	22-G	30	40	40	40	40	40	40	40	40	NP	NP	NP
Md. X	96	NR	55	55	55	NR	NS	600	22.4 18-e	44.8	58.4	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	35.2	65.2
Mass.	96 102 b	NR	33 35 j	40	NS	T 1 or ½	NS	800	NR	30-P 28-S	40	40	40	40	31-P 29-S	31-P 29-S	41	41	NP	NP	NP
Mich. p	96 102 b	12½	35	50	50	1½	NS	Table	18-P 16-S	36-PW 32-S	44-PW 39.2-S	54-PW 48-S	62-PW 55.2-S	70-PW 62.4-S	72-PW 64-S	80-PW 71.2-S	80-PW 71.2-S	88-PW 78.4-S	90-PW 80-S	98-PW 87.2-S	114-PW 101.6-S
Minn. TZ	96	12½	40	40	40	1 or ½	NS	NR	18-P u 10.8-S	36-PW 21.6-S	42-PW 25.2-S	54-PW 32.4-S	60-PW 36-S	66-PW 39.6-S	42-PW 25.2-S	42-PW 25.2-S	48-PW 28.8-S	48-PW 28.8-S	NP	NP	NP
Miss.	96	12½	40	40	55	1 or ½	40	NS	18-I 16-J	22	30	30	30	30	30	30	30	30	NP	NP	NP
Mo. Z	96	12½	33	40	40	1 or ½	NS	600	16	24	24	38	38	38	48	48	48	48	NP	NP	NP
Mont. XV[1]	96 102 b	13½	35	60	60	1 or ½	40	600	18-P 16-S	36-P 32-S	46.9	64.4	64.4	64.4	64.4	64.4	64.4	64.4	NP	NP	NP
Neb. T	96	12	35	42	45	1½	NS	NS	16	32-W	32	40	40	40	48	48	48	48	48	48	48
Nev.	NR	NR	NR	NR	NR	NR	42	600	NR	25	38	38	38	38	50	63	63	76	63	63	76
N. H.	96	NR	33	45	45	NR	NS	800	18	30	40	40	40	40	40	40	40	40	40	40	40
N. J.	96	12½	28 35 U	45	50	1 or ½	NS	Table	Table	30	40	60	60	60	60	60	60	60	NP	NP	NP
N. M. V[1]X	96 100 b	12½	35	45	45	1 or ½	40	700-P 500-S	18-I 16-J	36-I 32-J	40.2-I 40.2-J	46.2-I 46.2-J	46.2-I 46.2-J	46.2-I 46.2-J	46.2-I 46.2-J	46.2-I 46.2-J	46.2-I 46.2-J	46.2-I 46.2-J	NP	NP	NP
N. Y. X	96 106 b	13	35	50	50	1 or ½	45	800-P 640-S	22.4-P 17.9-S	36-P 28.8-S	44-P 35.2-S	61.5-P 49.2-S	61.5-P 49.2-S	61.5-P 49.2-S	61.5-P 49.2-S	61.5-P 49.2-S	61.5-P 49.2-S	61.5-P 49.2-S	NP	NP	NP
N. C.	96	12½	35	45i	45i	1 or ½	NS	600	18-I 16-J	20 L	40 L	40	40	40	40	40	40	40	NP	NP	NP
N. D. T	96	12½	35	40	40	1 or ½	40	550	18 14-f	35	35	40	40	40	40	40	40	40	NP	NP	NP
Ohio XZ	96	12½	35	45	60	NR	NS	650	18-P 16-S	38-P 32-S	50.2-P 40.2-S	57.7-P 46.2-S	57.7-P 46.2-S	57.7-P 46.2-S	69-P 55.2-S	69-P 55.2-S	69-P 55.2-S	69-P 55.2-S	69-P 55.2-S	69-P 55.2-S	69-P 55.2-S

WEIGHT LIMITS



STATE	SIZE RESTRICTIONS (K)							GROSS WEIGHT (LEGAL LIMITS)		(See NOTE) PRACTICAL GROSS WEIGHT LIMITS (K) (In thousands of pounds) (Where No Distinction is Made Between Pneumatic and Solid Tire Limits, Below Limits Apply to Both)												
	Width (In Inches)	Height (In Feet)	LENGTH: Single Unit	LENGTH: Tractor Semi-Trailer	LENGTH: Other Combinations	Number of Trailers (Semi-Trailer = ½)	Minimum Tandem Axle Spacing	Per Inch of Tire Width	Per Axle (1000 lb.)	4-Wheel Single Unit	6-Wheel Single Unit	4-Wh. Tractor 2-Wh. Semi-T.	4-Wh. Tractor 4-Wh. Semi-T.	6-Wh. Tractor 4-Wh. Semi-T.	4-Wh. Truck 4-Wh. Trailer	4-Wh. Truck 6-Wh. Trailer	6-Wh. Truck 4-Wh. Trailer	6-Wh. Truck 6-Wh. Trailer	4-Wh. Tractor 2-Wh. Semi-T. 4-Wh. Trailer	4-Wh. Tractor 4-Wh. Semi-T. 4-Wh. Trailer	6-Wh. Tractor 4-Wh. Semi-T. 6-Wh. Trailer
Okla.	96	12½	45	45	45	1½	NS	600	NS	24	24	47	47	47	47	47	47	47	47	47	47
VXZ Ore.	96	11	35	50	50	NR	40	600 q	18 w / 16 x	‖34	‖46.9 w / 46.9 x	54	54	54	54	54	54	54	54	54	54
Z Pa.	96	12½	33	45	50	1 or ½	36	800	18 y	26 H	36 H	39	39	39	52	62	62	62	NP	NP	NP
R. I.	102	12½	NR	45	45	1 or ½	NS	800	22.4	32-P / 28-S	40	40	40	40	64-P / 56-S	72-P / 68-S	72-P / 68-S	80	NP	NP	NP
X S. C.	96	12½	35	45	45	1 or ½	40	NR	18-I / 16-J	25	‖25	‖40	‖40	‖40	‖40	‖40	‖40	‖40	NP	NP	NP
S. D.	96	13	30	40	40	1 or ½	NS	NR	NR	20	24	30	30	30	30	30	30	30	NP	NP	NP
Tenn.	96	12	27	35	35	1 or ½	NS	NS	16	30	30	30	30	30	30	30	30	30	NP	NP	NP
X Tex.	96	12½	35	45	45	1 or ½	40	650-I / 600-J	18-I / 16-J	‖36	‖38	‖38	‖38	‖38	‖38	‖38	‖38	‖38	NP	NP	NP
XZ Utah	96	14½	45	60	60	1 or ½	NS	800 o	18-P / 13.5-S	‖36-P / 27-SW	‖53.9-P / 40.4-S	‖64.4-P / 48.3-S	‖64.4-P / 48.3-S	‖64.4-P / 48.3-S	‖64.4-P / 48.3-S	‖64.4-P / 48.3-S	‖64.4-P / 48.3-S	‖64.4-P / 48.3-S	NP	NP	NP
Z Vt.	96	12	50	50	50	1 or ½	40	600	NR	28 M / 16	40 M / 16	40 M / 16	40 M / 16	40 M / 16	40 M / 16	40 M / 16	40 M / 16	40 M / 16	NP	NP	NP
VZ ★Va.	96	12½	33 g	45	45	1 or ½	40	650	16	24	35	35	35	35	35	35	35	35	NP	NP	NP
X Wash.	96	12½	35	60	60	1 or ½	NS	500	18	‖28	‖34	‖69	‖69	‖69	‖69	‖69	‖69	‖69	NP	NP	NP
W¹XZ W. Va.	96	12½	35	45	45	NR	40	NS	18-PB / 14-SB	36-PWB / 28-SB	54-PWB / 42-SB	54-PWB / 42-SB	72-PWB / 56-SB	90-PWB / 70-SB	72-PWB / 56-SB	90-PWB / 70-SB	90-PWB / 70-SB	102.4PB / 81.9-SB	90-PWB / 70-SB	102.4PB / 81.9-SB	102.4PB / 81.9-SB
VZ Wisc.	96 d	12½	33 / 35 j	45	45	1 or ½	40	800	19-C / 12-D	24-Ck / 15-D	36-C / 22.5-D	43-C / 27-D	48-C / 30-D	60-C / 37.5-D	48-C / 30-D	60-C / 37.5-D	60-C / 37.5-D	72-C / 45-D	NP	NP	NP
X Wyo.	96	12½	40	45	45	NR	NS	800	18	‖36	‖43.2	‖46.2	‖46.2	‖46.2	‖46.2	‖46.2	‖45.2	‖46.2	‖46.2	‖46.2	‖46.2

‖—See explanation in Note at right.
a—If registered before 1932.
b—At rear tires, when solids changed to pneumatics.
c—Regulated "for hire" vehicles.
d—104 inches for urban buses.
e—If less than 50 inches apart
f—If less than 8 feet apart.
g—Buses allowed 35 ft. length.
h—Trailers are limited to 26 feet.
i—Exclusive of bumpers.
j—Buses permitted 35 feet.
k—Special limitations, vehicles with 2 driving axles.
o—Graduated according to tire width.
p—13,000 lbs. on tandem axles 3 ft. 6 in. apart; applies June 1 to February 28; differs with season.
q—500 lbs. when total tires under 30 inches wide.
s—Permissible on axles spaced under 12 feet.
t—Dual tires 8 inches wide or over.
u—12,000 lbs. when axles spaced under 8 feet apart.
w—Permissible weight on paved highways.
x—Permissible weight on unpaved highways.
y—16,500 lbs. on rear, 8,000 on front axle of 6-wheelers.
z—City of Clinton, Ill., limits truck gross weight to 12,000 lbs.
★—Virginia—State Highway Commission may increase axle weight to 18,000 and gross weight of six-wheel vehicle or combinations from 35 000 to 40,000 lbs. on designated highways. (Governor's approval pending)

Table—There is a table of axle weights based upon tire widths.
NP—Not permitted. P—Pneumatic tires.
NR—No restriction. PL—Pay load.
NS—Not specified. S—Solid tires.
B—In "Industrial Areas"—varies for different "areas."
C—Permissible on "Class A" highways.
D—Permissible on "Class B" highways.
E—Trailers permitted 32,000 lbs.
G—Axles less than 10 ft. apart limited to 16,000 lbs.
H—Maximum shown—gross depends on chassis weight.
I—Permissible on balloon tires.
J—Permissible on other than balloon tires.
K—May exceed on designated highways with permit.
L—Buses permitted 22,500 maximum net weight.
M—On State highways.
N—38,000 lbs. with pneumatic tires, 3 axles, 2 hubs and brakes on each hub.
Q—Different limits for "for hire" vehicles.

NOTE ON "W" AND SHADED SQUARES

Except when shown in squares shaded with parallel lines or when followed by the letter "W," the above gross weight limits are the limits fixed by state law.

When shown in shaded squares the above limits are computations made by the National Highway Users Conference to show what it considers to be practical gross weights where gross weights are arrived at by application of one of the formulae shown below under Footnote "X." In making these computations, wheel base was arrived at by deducting 8 ft. total over-hang front and rear from permissible overall length of unit or combination; tandem axles were considered to be a minimum permissible distance apart; H-20 bridge formula was used in West Virginia. When actual over-hang is less than 8 ft. additional gross weight will be possible.

When followed by the letter "W," the limits shown are maximum possible weights where gross weight is determined by permissible axle weight. These limits are possible only when each axle carries a gross weight equal to the permissible axle limit as shown.

T—With the following exceptions full trailers are permitted the same gross weight as other single units:—
Ala., Iowa, Conn., Ky.—Full trailers prohibited.
Ill.—All trailers limited to 32,000 lbs. gross.
Mass.—Trailers limited to 1,000 lbs. capacity.
Minn.—Trailers limited to 6,000 lbs. gross.
Nebr.—All trailers limited to 16,000 lbs. gross.
N. Dak.—Trailers, 35,000 lbs.
Weight of trailers is limited by axle limitations and formula, in states determining gross weight by formula.
U—35 ft. allowed on vehicles with three axles.
V—Solid tires prohibited.
V¹—Solid tires prohibited except on property carrying vehicles operating at 10 miles per hour or less.
V²—Solid tires limited to 20 miles per hour under 10,000 lbs., and to 12 miles per hour over 10,000 lbs.
W—See Note at left.
W¹—Maximum gross when all axles carry maximum load—See "Note."

X—States where gross weight is determined by formula (See formula computations on next page).
Ark.—650-700 (L plus 40) two or more consecutive axles and any unit or combination.
Cal.—800 (L plus 40) applies to vehicles and combinations first registered on or after Jan. 1, 1942, if total wheel base exceeds 18 feet; 700 (L plus 40) applies to vehicles and combinations if axle spacing 18 feet or less, first registered on or after Jan. 1, 1942; 850 (L plus 40) or 68,000 lbs. maximum, if total wheel base is between 25 and 45 feet, inclusive, for vehicles and combinations first registered prior to Jan. 1, 1942; terminates Jan. 1, 1952. 800 (L plus 40) if axle spacing of two or more axles is between 14 and 18 feet, inclusive, for vehicles and combinations first registered prior to Jan. 1, 1942; terminates Jan. 1, 1952.
Colo.—700 (L plus 40) semi-trailers.
Ga.—700 (L plus 40) any unit or combination.
Ind.—700 (L plus 40) two or more consecutive axles and any unit or combination.
Iowa—450 (L plus 53-⅓) any unit or combination; vehicles registered in Iowa permitted 17,000 lbs. axle weight and gross of 28,000 lbs. plus 500 lbs. per foot of axle spacing.
Kans.—700 (L plus 40) only applies to combinations.
Md.—750 (L plus 40) any unit or combination.
Mont.—650 (L plus 40) for axle spacing to 20 ft. and 700 (L plus 40) above 20 ft.
N. M.—600 (L plus 40) two or more consecutive axles and any unit or combination.
N. Y.—750 (L plus 40) three or more consecutive axles and any unit or combination.
Ohio—750 (L plus 40) 3 or more axles.
Ore.—700 (L plus 40) any unit or combination.
S. C.—700 (L plus 40) any unit or combination.
Texas—700 (L plus 40) any unit or combination.
Utah—700 (L plus 40) any unit or combination.
Wash.—750 (L plus 40) any unit or combination if axle spacing over 18 feet; 650 (L plus 40) if axle spacing 18 feet or less.
W. Va.—1330-1000-670 (L plus 40) applies to highways dependent on type of bridges thereon.
Wyo.—600 (L plus 40) two or more consecutive axles and any unit or combination.
Z—See detailed comment by States on next page.

NATIONAL HIGHWAY USERS CONFERENCE, National Press Bldg., Washington, D. C.

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GROSS WEIGHTS COMPUTED BY FORMULAS

Computation of Gross Weights according to formulas, based on distance (in feet) between first and last axles, for States identified by State Size & Weight Limits chart by Footnote "X." It should be remembered that the figures in each column represent only a mathematical extension and are governed by Legal Overall Length Limits for single units and combinations of particular states. Also, that formula computations are superseded in some instances by specific limits given in the chart.

"L" (See Note Below)	Iowa	Ohio[7]	Indiana New Mexico Wyoming	Arkansas[1] Montana[3] Washington[6]	West Virginia (H-10 Bridges)	Arkansas,[2] California[9], Colorado, Georgia, Kansas, Montana[4], Oregon, S. Car., Texas, Utah	Maryland New York Ohio[8] Washington[5]	West Virginia (H-15 Bridges)	West Virginia (H-20 Bridges)	California[10]	California[11]	"L" (See Note Below)
	450 (L + 53½)	18000 + (L + 40)	600 (L + 40)	650 (L + 40)	670 (L + 40)	700 (L + 40)	750 (L + 40)[8]	1000 (L + 40)	1330 (L + 40)	800 (L + 40)	850 (L + 40)	
10 ft.	28500 lbs.	33000 lbs.	30000 lbs.	32500 lbs.	33500 lbs.	35000 lbs.	37500 lbs.	50000 lbs.	66500 lbs.	..... lbs.	..... lbs.	10 ft.
11	28950	34500	30600	33150	34170	35700	38250	51000	67830	.....	.....	11
12	29400	36000 max.	31200	33800	34840	36400	39000	52000	69160	.....	.....	12
13	29850	.....	31800	34450	35510	37100	39750	53000	70490	.....	.....	13
14	30300	.....	32400	35100	36180	37800	40500	54000	71820	43200	.....	14
15	30750	.....	33000	35750	36850	38500	41250	55000	73150	44000	.....	15
16	31200	.....	33600	36400	37520	39200	42000	56000	74480	44800	.....	16
17	31650	.....	34200	37050	38190	39900	42750	57000	75810	45600	.....	17
18	32100	.....	34800	37700	38860	40600	43500	58000	77140	46400	.....	18
19	32550	.....	35400	38350	39530	41300	44250	59000	78470	47200	.....	19
20	33000	.....	36000	39000	40200	42000	45000	60000	79800	48000	.....	20
21	33450	.....	36600	39650	40870	42700	45750	61000	81130	48800	.....	21
22	33900	.....	37200	40300	41540	43400	46500	62000	82460	49600	.....	22
23	34350	.....	37800	40950	42210	44100	47250	63000	83790	50400	.....	23
24	34800	.....	38400	41600	42880	44800	48000	64000	85120	51200	.....	24
25	35250	.....	39000	42250	43550	45500	48750	65000	86450	52000	55250	25
26	35700	.....	39600	42900	44220	46200	49500	66000	87780	52800	56100	26
27	36150	.....	40200	43550	44890	46900	50250	67000	89110	53600	56950	27
28	36600	.....	40800	44200	45560	47600	51000	68000	90440	54400	57800	28
29	37050	.....	41400	44850	46230	48300	51750	69000	91770	55200	58650	29
30	37500	.....	42000	45500	46900	49000	52500	70000	93100	56000	59500	30
31	37950	.....	42600	46150	47570	49700	53250	71000	94430	56800	60350	31
32	38400	.....	43200	46800	48240	50400	54000	72000	95760	57600	61200	32
33	38850	.....	43800	47450	48910	51100	54750	73000	97090	58400	62050	33
34	39300	.....	44400	48100	49580	51800	55500	74000	98420	59200	62900	34
35	39750	.....	45000	48750	50250	52500	56250	75000	99750	60000	63750	35
36	40200	.....	45600	49400	50920	53200	57000	76000	101080	60800	64600	36
37	40650	.....	46200	50050	51590	53900	57750	77000	102410	61600	65450	37
38	41100	.....	46800	50700	52260	54600	58500	78000	103740	63400	66300	38
39	41550	.....	47400	51350	52930	55300	59250	79000	105070	63200	67150	39
40	42000	.....	48000	52000	53600	56000	60000	80000	106400	64000	68000 max.	40
41	42450	.....	48600	52650	54270	56700	60750	81000	107730	64800	.....	41
42	42900	.....	49200	53300	54940	57400	61500	82000	109060	65600	.....	42
43	43350	.....	49800	53950	55610	58100	62250	83000	110390	66400	.....	43
44	43800	.....	50400	54600	56280	58800	63000	84000	111720	67200	.....	44
45	44250	.....	51000	55250	56950	59500	63750	85000	113050	68000	.....	45
46	.....	.....	.....	55900	.....	60200	64500	.....	.....	68800	.....	46
47	.....	.....	.....	56550	.....	60900	65250	.....	.....	69600	.....	47
48	.....	.....	.....	57200	.....	61600	66000	.....	.....	70400	.....	48
49	.....	.....	.....	57850	.....	62300	66750	.....	.....	71200	.....	49
50	.....	.....	.....	58500	.....	63000	67500	.....	.....	72000	.....	50
51	.....	.....	.....	59150	.....	63700	68250	.....	.....	72800	.....	51
52	.....	.....	.....	59800	.....	64400	69000	.....	.....	73600	.....	52
53	.....	.....	.....	60450	.....	65100	69750	.....	.....	74400	.....	53
54	.....	.....	.....	61100	.....	65800	70500	.....	.....	75200	.....	54

"L"—distance in feet between first and last axles of group of axles considered.
1—Arkansas vehicles with axles spaced not more than 7 ft. apart.
2—Arkansas vehicles with axles spaced over 7 ft. apart.
3—Montana vehicles with axles spaced not more than 20 ft. apart.
4—Montana vehicles with axles spaced over 20 ft. apart.
5—Washington vehicles with axles spaced over 18 ft.
6—Washington vehicles with axles spaced 18 ft. or less.
7—Ohio—applies to two successive axles only; see footnote 8.
8—Ohio—applies to three or more axles. In Ohio the formula which applies to these cases is "30,000 plus (length times 750)", which results in the same figures as used above for "750 times (length plus 40)". See footnote7 .
9—In California this applies (up to 18 feet) to any two or more axles on any vehicle or combination which was first registered on or after Jan. 1, 1942.
10—This applies (1) to any vehicle or combination with total wheel base exceeding 18 ft. which was first registered on or after Jan. 1, 1942.
(2) to any vehicle or combination, which was first registered prior to Jan. 1, 1942, having a group of two or more axles, where the distance between the first and last axles of the group is between 14 and 18 ft., inclusive. Terminates Jan. 1, 1952.
11—This applies to any vehicle or combination first registered prior to Jan 1, 1942. where the total wheel base is between 25 and 45 ft., inclusive. Maximum 68000 lbs. Terminates Jan. 1, 1952.

RESTRICTIONS PECULIAR TO CERTAIN STATES

ARK. Maximum gross weights subject to maximum capacity based on tire sizes. Tolerance of 7½ per cent is allowed above allowances listed per tire sizes shown in Table (NHUC Size & Weight Book), but maximum axle weight is limited to 16,000 lbs. Vehicle weight allowances shown in State Size & Weight Limits chart are calculated on the basis of 8,000 lbs. on the front axle and 16,000 lbs. on all others. Single unit buses allowed axle weight of 17,600 lbs. if equipped with dual mounted low pressure tires not less in size than 10.50 x 22 in.

CALIF. 18,000 lbs. per axle permitted on vehicles, registered prior to 1930 (11,000 per wheel), until Dec. 31, 1942.

CONN. Not more than 80 per cent of vehicle gross on any one axle.

DELA. 2,000 lbs. additional allowed on three-axled trucks with pneumatic tires and two hubs and brakes on each hub.

D. C. Solid tires, when permitted, allowed 10 per cent less than pneumatics.

FLA. Private vehicles allowed 16,000 lbs. with power brakes and six tires.
For hire vehicles: (Solid tires forbidden.)
Trucks allowed 24,000 lbs. with power brakes and 12,000 lbs. unladen.
Tractor-semi trailer allowed 40,000 lbs. if both vehicles have power brakes.
Four-wheeled trailer allowed 20,000 lbs. with power brakes and over-sized tires.
No unit may carry a payload over 12,000 lbs.

KY. Trucks and tractor-semi-trailers permitted 16,000 lbs. per axle, 28,000 lbs. gross weight and 33 feet length (tractor-semi-trailers) during National Emergency.

MINN. When axles spaced under 8 ft. apart restricted to 12,000 lbs. on pneumatics and 7,200 lbs. on solid tires.

MO. Special size and weight limitations apply in cities of 75,000 population or over.

OHIO Vehicles in use before Jan. 1, 1942, until Aug. 13, 1947, allowed—

	Pneumatic Tires	Solid Tires
Single units	24,000 lbs.	20,000 lbs.
Tractor-semi-trailer.	42,000	36,000
Other combinations.	66,000	56,000

ORE. Highway Commission authorized length of 60 feet and gross weight of 68,000 lbs. for civilian cargoes as well as Army and Navy goods. The greatest allowances shown in State Size & Weight Limit chart are permitted on paved highways, and the lowest allowances are the maxima permitted on unpaved highways.

PA. Six-wheelers must have minimum axle spacing of 36 in. between the two rear axles. Buses operating within municipalities exempted from 18,000 lbs. axle and 26,000 lbs. gross limits.

UTAH Gross weight also limited to three times unladen weight.

VT. The greatest allowances shown in State Size & Weight Limit chart are permitted on state highways, medium allowances are the maxima permitted on state-aid highways, and the lowest allowances are the maxima permitted on other highways.

VA. Two-axled vehicles with six-wheels permitted 32,000 lbs. gross.

W.VA. No unit may carry a load more than 100 per cent greater than its registered capacity if registered for not over two tons; or more than 50 per cent greater if registered for over two but not over four tons; or more than 25 per cent greater if registered for over four tons.

WISC. Four-wheeled vehicles with two driving axles spaced 8 ft. or more apart permitted gross weight of 28,000 lbs.; if gross weight exceeds 24,000 lbs., the axle weight must not exceed 16,000 lbs. if equipped with high pressure pneumatic tires or 18,000 lbs. if equipped with balloon or low pressure tires.

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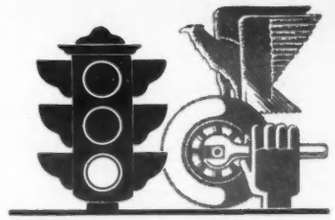
SAFETY EQUIPMENT

STATE REGULATIONS ICC



KEEP 'EM ROLLING

KEY TO SYMBOLS—(State Commission Rulings Are Given in Italics)

GENERAL

A—Amber
B—Blue
B & Bu—Buses
C—Carriers
CC—Common Carriers regular route
CMV—Commercial Motor Vehicles
Cert & Perm—Certificated and Permit Carriers
Comb—Combinations
Cor—Corner
E—Each
Enc—Enclosed
F—Front
FHC—For-Hire Carriers
FHT—For-Hire Trailers
F/R—Front and Rear
G—Green
IC—Inside Corner
L—Left
LC—Lower Corner
LP—Lower Part
MC—Motor Carriers
MTV—Motor Truck Vehicles
MV—Motor Vehicles
NMV—New Motor Vehicles
NO—Not Over
NS—Not Specified
P—Purple
Permit CC—Permit Car Carriers
PC—Passenger Carriers
PO—Points
Pro—Upon Proclamation
PS—Public Service
PT—Property Transporters
R—Red
SemiT—Semi-Trailer
SB—School Bus
T—Truck
TB—Top and Bottom
TC—Top Corners
TL—Tail Light
Tr—Tractor
Trl—Trailer
TTr—Truck-tractor
UC—Upper Corners
UP—Upper Portion
W—White
X—Other Than
Y—Yellow
Y—Yes
/—Or

BRAKES

C—"Adequate to control the movement of and to stop and to hold such vehicle, including two separate means of applying the brakes."
D—"Adequate"; "sufficient to control"; "good and sufficient"; "efficient"; "serviceable."
L—Brakes operated by driver.
(1)—So constructed if unit becomes disconnected brakes lock automatically.
(3)—Required on every wheel.
(5)—Air power or vacuum booster brakes (or electric in Fla. and Mich. and Wis.).
*—Where no designation of the specific class (i.e., trailer or semitrailer) is made, both classes must be understood.

DIRECTIONAL SIGNALS & STOPLIGHT

DD—When so loaded or constructed as to make hand signal invisible.

STATE	Brakes: Special Provisions For Trailers and Semi-Trailers: Applicable To *	Brakes: Special Provisions For Trailers and Semi-Trailers: Type Required	Flares and Fusees: Must Be Used By	Flares and Fusees: Number	Directional Signals: Required	Directional Signals: Must Be Approved	Insurance: Compulsory Insurance	Insurance: Financial Responsibility	Stoplights: Required	Stoplights: Must Be Approved
I. C. C.	*Over 3000 lb. gross*	*(1)*	*B, T, TTr*	*3*	*No*	*No*			*B, T*	*No*
Ala.			B, T, CMV	2	Yes DD	Yes	No	No	Yes DD	Yes
Ariz.	*Trailers*	*(5)L*	*MC*	*3*	Yes DD	Yes	No	Yes	Yes DD	Yes
Ark.	Over 1500 lbs.		T	3	Yes DD	Yes	No	No	Yes DD	Yes
Calif.	Over 6000 lbs.	LC	T over 2 Ton, TTr	2	Yes DD	Yes	No	Yes	Yes DD	Yes
Colo.	Over 3000 lb. gross	(1)L	T, B	3	Yes DD	Yes	No	Yes	Yes	Yes
Conn.	Over 4000 lb.	L	PSMV, CMV ov. 1t Comb	NS	Yes DD	Yes	No	Yes	Yes DD	Yes
Del.	Over 4000 lb. gr. or 10 m.p.h.	L	T over 80 in. wide	3	Yes DD	Yes	No	Yes	Yes DD	Yes
D. C.					No	No	No	Yes	Yes	Yes
Fla.	Over 3000 lbs.	(1)L	T, B, TTr	3	Yes DD	No	No	No	Yes	No
Ga.	2 axled Trl	(5)L			No	No	No	No		
Idaho	Over 1500 lb. net	*C*	*B, T, TTr*	*3*	Yes DD	Yes	No	Yes	Yes DD	Yes
Ill.	Over 3000 lb. gross	(1)L	CMV, B	3	Yes DD	Yes	No	Yes	Yes DD	Yes
Ind.	Over 3000 lb. gross	(1)L	T, B, TTr	3	Yes DD	Yes	No	Yes	B-Yes DD	Yes
Iowa	Over 3000 lb. gross	(1)L	T	3	No	No	No	No	Yes	Yes
Kans.			*MC/T*	3	No	No	No	Yes		
Ky.	Semi-Trailers	L	T	3	No	No	No	Yes	T, B	No
La.	Over 1500 lb. net	(3)L	T, B, Comb	3	Yes DD	Yes	No	No	Yes DD	Yes
Maine	*Trailers, 2 Tons or more*		*MC*	*3*	No	No	No	Yes	B	No
Md.			CMV over 2T, B	2	No	No	No	Yes	B	No
Mass.			CMV over 5000 lbs.	3	Yes DD	Yes	Yes	Yes	BYesDD	No
Mich.	Over 3000 lb. gross	(5)L	*MC*	*3*	Yes DD	Yes	No	Yes	Yes DD	No
Minn.	Over 1500 lb. gross	L	T, B, Tr	3	Yes DD	Yes	No	Yes	Yes DD	Yes
Miss.	Trailers over 1 Ton	(1)L	T, B	NS	Yes DD	Yes	No	No	Yes DD	Yes
Mo.					Yes DD	Yes	No	No	Yes	Yes
Mont.					No	No	No	No		
Nebr.			T, B, Comb	3	Yes DD	Yes	No	Yes	BYesDD	Yes
Nev.	Over 3000 lb. gross				No	No	No	No		
N. H.	Over 3000 lb. gross		T, Tr, B	2	No	No	No	Yes		
N. J.	Over 3000 lb. gross	(1)L	B, CMV over 2½ Ton	3	Yes DD	Yes	No	Yes	B-Yes DD	Yes
N. M.	Over 1500 lb. net load (cap.)	(3)L	T over ton	3	Yes DD	Yes	No	No	Yes DD	Yes
N. Y.	Over 1000 lb. net	(5)	T over 2t, B, Comb	2	Yes DD	Yes	No	Yes	*B*	No
N. C.	2 tons or over	L	T, Trl, SemiT	NS	Yes DD	Yes	No	Yes	*MC* Yes DD	Yes
N. D.					Yes DD	Yes	No	Yes	Yes DD	Yes
Ohio	2000 lbs. or more	(1)L	B, T, Tr	3	No	No	No	Yes	T, B	
Okla.					No	No	No	No		
Ore.			B, T	3	Yes DD	Yes	No	Yes	Yes DD	Yes
Penna.	Over 1000 lb. net	(1)L	B,CMV,Comb, over 5½ t	3	Yes DD	Yes	No	Yes	Yes DD	Yes
R. I.	Trailers, gross over 14 tons		PSMV,CMV ov. 1t., comb	NS	Yes DD	Yes	No	Yes		
S. C.	*SemiT over 1½ ton, Trl,* Over 3000 lbs. gross	(1)L	T, Trl, SemiT, *MC*	3	Yes DD	Yes	No	No	Yes DD	Yes
S. D.			T, Tr Comb	3	Yes DD	Yes	No	Yes	Yes DD	Yes
Tenn.	SemiTrailers, ton or ov. gr. Over 3000 lb. gross	(3)L	B, T, TTr	3	No	No	No	No	Yes	
Texas			CMV, Comb, B	3	No	No	No	No		
Utah	Over 3000 lbs.	(1)L	B, T, TTr	3	Yes DD	Yes	No	No	T, B Yes DD	Yes
Vt.			B, T, Comb	3	No	No	No	Yes		
Va.	Over 2 tons	L	B, T	3	Yes DD	Yes	No	Yes	Yes DD	Yes
Wash.	Over ton gross	L	T, CMV, Comb	3	Yes DD	Yes	No	Yes	Yes	Yes
W. Va.	Over 3000 lbs. gross	(1)L			No	No	No	Yes		
Wisc.	Over 3000 lbs. gross	L	T, Comb	1or2	No	No	No	Yes		
Wyo.	Over 3000 lbs. gross	(1)L	T, Comb, B	3	Yes DD	Yes	No	No	Yes DD	Yes

SAFETY EQUIPMENT REGULATIONS CONTINUED ON NEXT PAGE

SAFETY EQUIPMENT REGULATIONS (CONTINUED)

KEY TO SYMBOLS—(State Commission Rulings Are Given in Italics)

GENERAL

For explanation of Alphabetical abbreviations, see page 27.

CLEARANCE LIGHTS

(1)—Except road roller, road machinery or farm tractor.

(2)—Except passenger common carrier.

(3)—Except buses operated wholly in municipalities with illuminated interiors.

(4)—Except small two-wheeled trailers of 1,000 pounds or less capacity towed closely behind motor vehicle (and semi-trailers towed alone in New Hampshire and West Virginia), whose length including towing vehicle is not over 30 ft.

(5)—Or which extends 40" or more to the left of the center of the chassis.

(6)—Over 7 ft. in height or extending 4 inches beyond the front fender extremes.

(7)—Over 8 ft. high.

(8)—3 tons or over.

(9)—Trucks over 2 tons.

(10)—Trains under Special Permit.

*—Reflectors may be substituted.

†—Identification lamps, spaced evenly 6"; 12" apart.

‡—Green to right, red to left.

§—Set by Commissioner.

REFLECTORS

*—May use in lieu of clearance lights.

†—May use in lieu of rear lights.

‡—Grouped as identification lights

(1)—Except road-roller, road machinery, or farm tractor.

(2)—Or whose load or any part extends 40 in. or more to the left of the center of the chassis.

(3)—Except private passenger motor vehicles.

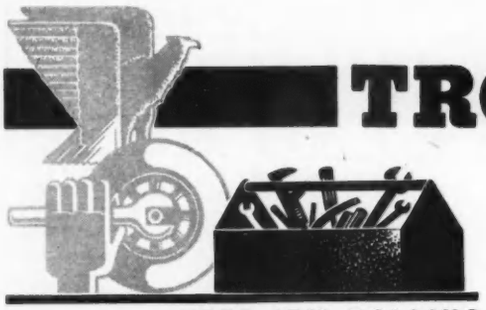
REFLECTORS

STATE	REQUIRED ON	In Excess of: Width (In.)	In Excess of: Length (Ft.)	No. Required: Front	No. Required: Rear	No. Required: Side	Color: Front	Color: Rear	Color: Side	Location: Side	Location: Spacing on Side	Location: Position from Ground (In.)	Visibility (Ft.): Front	Visibility (Ft.): Rear	Visibility (Ft.): Side	Need Approval
I.C.C.	*T, B, Trl, SemiT*			..	*2*	..	..	*R*	..	*1-E*	..	*24–60*	..	*500*	..	*No*
	T, B, Trl	*80*	..	..	..	*4*	*A*	*R*	..	*E*	*F, R*	*24–60*	..	*500*	..	*No*
	Semi over 5000 lbs.	..	..													
Ala.		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ariz.		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ark.	New Veh, CMV	..	..	..	1	..	..	R	..	..	..	24–42	..	500	..	Y
	Vehicles, Comb.	..	20	..	..	4*	G	R	..	E	F/R	..	..	..	500	Y
Calif.	T-Trl, T, T-SemiT 25,000 gross or more	..	..	..	2	..	..	R	..	1-E	..	24–42	..	500	..	Y
	New Veh, T 3000 up unladen	..	..	..	1	..	..	R	..	..	..	16–60	..	50–300	..	Y
Colo.	New MV, Trl, SemiT; All CMV	..	..	..	1	..	..	R	..	..	..	24–42	..	500	..	Y
Conn.	CMV	..	..	1	1	..	..	..	..	..	..	..	..	..	..	Y
	MV	72	..	*2**	*2**	..	W/A	WR/A	..	2-E	..	*24–56*	..	..	..	Y
Del.		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
D. C.	*CMV, Trl, SemiT*	..	..	..	*1*	..	..	*R*	..	..	..	..	..	*500*	..	..
Fla.	Same as I.C.C.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ga.	All Vehicles	..	..	NS	NS	..	..	..	..	..	..	..	..	..	..	Y
Idaho	B, T, Trl, SemiT over 3000 lbs. gross	..	..	..	2	2	..	R	..	1-E	R	24–60	..	50–500	..	..
	B, T	..	30													
	Trl, SemiT over 3000 lbs. gross	..	..	..	..	2	A	..	..	1-E	F	24–60	..	50–500	..	..
	Trl, 3000 lbs. or less	..	..	..	2	..	..	R	..	E	..	24–60	..	50–500	..	..
Ill.	PT, Bus	80	& 25	1	1	..	Y	R	..	L	..	LC	..	..	..	Y
	PT, Bus	..	20	..	..	4	..	..	A	2-E	½ PO	NO 60	..	..	..	Y
	Trl, SemiT	..	..	..	..	4	..	..	A	2-E	½ PO	NO 60	..	..	..	Y
Ind.	New Vehicles, except TTr	..	..	..	2	..	..	R	..	..	..	24–60	..	50–300	..	Y
	B, T, Trl, SemiT over 3000 lbs. gross	..	..	..	2	2	..	R	..	1-E	R	24–60	..	50–500	..	..
	B, T	..	30													
	Trl, SemiT over 3000 lbs.	..	..	..	..	2	A	..	..	1-E	F	24–60	..	50–500	..	..
	Trl, 3000 lbs. or less	..	..	..	2	..	..	R	..	E	..	24–60	..	50–500	..	..
Iowa	CMV, Trl, SemiT, new MV	..	..	..	1	..	..	R	..	..	..	24–42	..	500	..	Y
	T, Trl and Semi over 3000	..	..	..	2	2	W/Y/A	R	..	1-E	R	..	..	..	..	..
	T	80	& 30	..	..	2	W/Y/A	R	..	1-E	F	..	..	..	..	..
	Trl & SemiT over 3000	..	..	..	..	2	W/Y/A	R	..	1-E	F	..	..	..	..	..
Kan.	CMV, Trl, SemiT, new MV	..	..	..	1	..	..	R	..	..	..	24–60	..	500	..	..
	PT, PC	..	20	..	..	4*	A	R	..	2-E	F/R	24–60	..	..	500	..
Ky.		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
La.		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

CLEARANCE LIGHTS

STATE	REQUIRED ON	In Excess: Width (In.)	In Excess: Length (Ft.)	No. Required: Front	No. Required: Rear	No. Required: Side	Color: Front	Color: Rear	Color: Side	Location: Side	Location: Spacing on Side	Location: Position from Ground (In.)	Visibility (Ft.): Front	Visibility (Ft.): Rear	Visibility (Ft.): Side	Need Approval
I.C.C.	*B, T*	*80*	..	*2*	*2*	..	*A*	*R*	..	*E*	..	*Top*	*500*	*500*	*500*	..
	Tr and Trl, SemiT over 5000 lbs. gross	..	..													
	B, T	*80*	..	..	..	*4*	*A*	*R*	..	*E*	*F/R*	Top	*500*	*500*	*500*	..
	Tr and Trl SemiT over 5000 lbs. gross.	..	..													
Ala.	MV (1)	80	..	1	1	..	W	R	..	L	..	..	500	500	..	..
Ariz.	MV (1)	80	..	1	1	..	W	R	..	L	..	..	500	500	..	..
	MC	..	..	*2*	*2*	..	*W*	*R*	..	..	..	*UP*	..	..	..	..
Ark.	PT, PC (3)	80	..	1	1	..	G	R	..	L	..	..	500	500	..	Y
	PT, PC (3)	80 or	30	3†	3†	..	G	R	..	..	..	Top	500	500	..	Y
	PT, PC (3)	..	20	..	..	4*	G	R	..	2-E	F/R	..	..	..	500	Y
Calif.	MV (2)	80	..	2	2	..	A	A	..	E	F/R	..	500	500	500	Y
Colo.	PT, PC (3)	72 or	30	2	2	..	A/G	R	..	E	..	Top	500	500	..	..
	PT, PC (3)	80 or	30	3†	3†	..	A/G	R	..	..	..	Top	500	500	..	..
	PT, PC (3)	..	30	..	..	4	A/G	R	..	2-E	F/R	Top	500	500	..	..
Conn.	*CMV, Comb.*	*72*	..	*2**	*2**	..	*W/A*	*W/R/A*	..	*E*	..	*24–150*	..	..	..	*Y*
	Buses	..	..	*2*	..	..	*P*	..	..	*E*	..	*UC*	*500*	..	..	..
Del.	MV (1)	80	..	2	2	..	A	R	..	E	F/R	..	500	500	..	..
	Comb.	..	33	..	..	..	..	..	G	E	10'	..	..	..	..	..
D. C.	*Buses*	..	..	*1*	*2*	..	*B/P*	*R*	..	..	..	*UP*	..	..	..	..
Fla.	Same as I.C.C.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ga.	T over 1½ ton cap.	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..
Idaho	B, T	80	..	2	2	..	A	R	..	E	..	Top	500	500	..	..
	T, Tr, Trl or SemiT over 3000 lbs. gross	..	..													
	B, T	..	30	..	..	4	A	R	..	2-E	F/R	Top	..	..	500	..
	TTr, Trl or SemiT over 3000 lbs. gross	..	..													
Ill.	PT, Bus	80	& 25	3†	3†	..	G	R	..	..	..	Top	500	500	..	..
Ind.	B, T	80	..	2	2	..	A	R	..	E	..	Top	500	500	..	Y
	T, Tr, Trl or SemiT over 3000 lbs. gross	..	..													
	B, T	..	30	..	..	4	A	R	..	2-E	F/R	Top	..	..	500	Y
	T, Tr, Trl or SemiT over 3000 lbs. gross	..	..													
Iowa	T, Tr	80	..	2	2	..	W/Y/A	R	..	1-E	..	..	..	..	..	..
	Trl or SemiT over 3000 lbs															
	T, Tr, Trl, SemiT 3000 lbs. gross	80	& 30	..	..	4	W/Y/A	R	..	2-E	F/R	..	..	..	..	..
	T, Comb.	80 or	30	3†	3†	..	W/Y/A	R	..	..	..	Top	..	..	..	..
Kans.	PT, PC (3)	80	..	1	1	..	A	R	..	L	..	..	500	500	..	Y
	PT, PC (3)	80 or	30	3†	3†	..	A	R	..	..	..	Top	500	500	..	Y
	PT, PC (3)	..	20	..	..	4*	A	R	..	..	F/R	..	..	..	500	Y
Ky.	Trailer	..	..	..	..	1	G	R	..	L	..	..	500	500	..	..
	T, SemiT	84	..	1	1	..	W/G	R	..	L	..	..	500	500	..	..
La.	MV (1)	70	& 15	1	1	..	A	R	..	L	..	Top	500	500	..	Y
	T	..	..	3†	..	..	A	..	..	..	..	..	..	..	..	Y
	MC	..	..	..	..	*4*	..	..	..	*E-R*	*F/R*	..	..	..	..	..

| | | |



TROUBLE SHOOTING

KEEP 'EM ROLLING

ENGINES

This tabulation analyzes all the factors in three main engine troubles—knocks, excessive oil consumption, overheating—and also deals with Road Starting. No remedies of troubles are offered because in principle the remedy is obvious and in practice it is varied owing to circumstances and conditions.

ENGINE KNOCK

A—CONNECTING RODS

A1. Loose connecting rod bearing.
A2. Loose piston pins or worn piston pin bushings.
A3. Connecting rods bent or twisted.

B—PISTONS

B1. Piston slap, worn pistons or cylinders, tight piston pins.
B2. Rattle when piston rings are broken or loose in grooves.
B3. New piston rings in worn cylinder striking shoulder.
B4. Loose piston struts.

C—CYLINDERS

C1. Carbon knock.
C2. Fuel knock or detonation.
C3. Ignition timed too early or sticking automatic spark advance.
C4. Cylinder not at right angle to crankshaft.
C5. Wrong cylinder head gasket.
C6. Loose cylinder block.

D—CRANKSHAFT

D1. Loose main bearings.
D2. End-play in crankshaft.
D3. Loose flywheel, counterweights, vibration, dampener or timing gear.
D4. Bent or sprung crankshaft.

E—CAMSHAFT DRIVE

E1. Improperly adjusted timing chain.
E2. Worn timing gears.
E3. Main bearings adjusted so tightly that timing gears engage in too close mesh.
E4. Metal chip wedged between teeth of timing gear.
E5. Timing gear loose on shaft.
E6. Off center gears.

F—VALVE ACTION

F1. Too much clearance between valve and tappet.
F2. Worn valve lifter rollers, pins, or mushrooms.
F3. Worn valve lifter or guide.
F4. Worn valve stem guides.
F5. Worn rocker armshafts or bushings.
F6. Loose rocker armshaft bracket.
F7. Flat spot on rocker arm.
F8. Broken or weak valve springs.

G—CAMSHAFT GROUP

G1. Worn camshaft bearings.
G2. End-play in camshaft.
G3. Flat spot on the heel of a cam.

H—ENGINE GENERAL

H1. Loose engine support bolts.
H2. Engine support brackets loose in frame.
H3. Worn bushings on accessory shaft.
H4. Too much pressure or air lock on plunger-type oil pumps.
H5. Loose or worn magneto, pump, or generator couplings.
H6. Broken spring in fuel pump.

EXCESSIVE OIL CONSUMPTION

A—OIL PUMPING

A1. Insufficient ring tension.
A2. Insufficient clearance at ring gap.
A3. Rings too loose or too tight in grooves.
A4. Uneven ring pressure against cylinder wall.
A5. Warped or twisted rings.
A6. Too much clearance behind compression ring.
A7. Too little clearance behind oil ring.
A8. Out of round and tapered cylinders.
A9. Cylinders not at right angles to the crankshaft.
A10. Worn pistons and cylinder walls.
A11. Misaligned connecting rods.
A12. Loose and elliptical shaped engine bearings.
A13. Mismatched bearing halves.
A14. Too much clearance between valve stems and guides.
A15. Excessive oil pressure.
A16. Thin or diluted oil.
A17. Defective fuel pump.

B—OIL LEAKS

B1. Oil pan.
B2. Rear main bearing.
B3. Front main bearing.
B4. Oil pump.
B5. Rear camshaft bearing.
B6. Timing case cover.
B7. Valve tappet cover.
B8. Rocker arm cover.
B9. Accessory shaft opening in timing case.

OVERHEATING

A—RADIATOR

A1. Insufficient supply of water.
A2. Obstructed air flow.
A3. Radiator core covered with heavy paint.
A4. Fins or air passages stopped up with mud or insects.
A5. Tubes or passages pinched, bent or dented.
A6. Shutter not opening fully.
A7. Anti-freeze not removed.
A8. Bent or loose baffle plate.
A9. Leak in overflow pipe.
A10. Pinched overflow pipe.
A11. Inside of tubes or passages clogged with sediment, etc.
A12. Thermostat not functioning properly.
A13. Incorrect radiator core.

B—FAN

B1. Slipping fan belt.
B2. Fan pulley worn too smooth or wide in groove.
B3. Fan bearings tight, dry, or defective.
B4. Fan blades too flat.

C—WATER HOSE

C1. Hose old or thin causing collapse from pump suction.
C2. Rotted internally permitting lining to impede circulation.

D—WATER PUMP

D1. Loose impeller.
D2. Excess wear between impeller and housing.
D3. Worn pump shaft or packing.

E—WATER JACKET

E1. Core not completely removed from casting.
E2. Circulating holes partially stopped up.
E3. Insulated with rust, etc., or stopped up with hose fragments.
E4. Improper cylinder head gasket.

GUIDE 1—ENGINES . . . 2—BRAKES . . . 3—TIRES

F—ENGINE

F1. Engine tight, new or overhauled.
F2. Oil pump not circulating efficiently.
F3. Oil too thin or diluted, or too heavy.
F4. Improper valve timing.
F5. Valves not properly seated.
F6. Pistons and rings not properly fitted.
F7. Excessive piston ring wall pressure.
F8. Scored cylinder walls.
F9. Insufficient clearance at ring ends.

G—CARBURETOR AND MANIFOLDS

G1. Mixture too rich or too lean.
G2. Air leaks in manifold.
G3. Improper regulation of heat control.

H—IGNITION

H1. Improperly timed ignition or sticking spark advance.

HARD STARTING

A—IGNITION

A1. Low battery.
A2. Improperly spaced or dirty spark plugs.
A3. Improperly spaced or dirty points.
A4. Weak coil.
A5. Weak condenser.
A6. Defective starting motor.
A7. Too heavy oil.
A8. Poor insulation on high tension wires.

B—FUEL SYSTEM

B1. Vapor lock.
B2. Improper carburetor adjustment.
B3. Improper automatic choke adjustment.
B4. Defective fuel pump.

BRAKES

LOW BRAKE PEDAL

A—HYDRAULIC BRAKES

A1. Fluid low in master cylinder.
A2. Air in hydraulic line.
A3. Too much clearance between pedal push rod and master cylinder piston.
A4. Master check valve too weak, thereby failing to keep hydraulic preloaded.
A5. Master cylinder partially or completely closed restricting the flow of fluid from supply tank to cylinder.
A6. Weak brake hoses expand.

B—MECHANICAL BRAKES

B1. Worn cables and conduits.
B2. Bent pull rods permit too much play in mechanical linkage.
B3. Cross shaft improperly adjusted.
B4. Cam blocks worn.

C—ALL TYPES

C1. Brake lining worn too thin.
C2. Too great a clearance between lining and drum.
C3. Broken spring bolts or loose clips allowing axle to shift on brake application.

SPONGY BRAKE PEDAL

A—HYDRAULIC BRAKES

A1. Inferior grade of fluid which compresses under brake application.
A2. Air or gas bubbles in line.
A3. Master cylinder primary cup leaking allowing fluid to by-pass into reserve cylinder.
A4. Clogged master cylinder port retarding flow of fluid into cylinder.
A5. Brake hoses weak.

B—MECHANICAL BRAKES

B1. Brake cables stretched or kinded rods straightening under pressure.
B2. Brake cables or conduits loose in supports.
B3. Cross shafts incorrectly set.

C—ALL TYPES

C1. Brake shoes set with too close a clearance at the heel.
C2. Brake drums too thin resulting in excessive expansion when under pressure or heat.
C3. Axles shift due to broken spring center bolts or "U" bolts.
C4. Shoes not centered on drums.

BRAKE NOISES

A—HYDRAULIC BRAKES

A1. Insufficient pressure on brake shoes due to sluggish system or sticking wheel cylinders.

B—ALL TYPES

B1. Brake shoes not centralized within drum—either too great a heel or toe contact resulting in high pressure or plate squeal.
B2. Shoes vibrate due to weak retractor springs or guide springs.
B3. Lining loose on brake shoes.
B4. Loose backing plates.
B5. Loose wheel bearing.
B6. Out-of-round drums, or drums loose on hubs.
B7. Brake shoe vibrates due to too much play in shoe guides.
B8. Lining or road dust in assembly.

ERRATIC BRAKES

A—HYDRAULIC BRAKES

A1. Air or gas in line.
A2. Dirty brake fluid.
A3. Improper operation of master cylinder check valve.

B—MECHANICAL BRAKES

B1. Cable or rod control incorrectly set failing to exert same pressure at all wheels.
B2. Cam levers set wrong.
B3. Linkage loose and greasy.

C—ALL TYPES

C1. Brake shoes not accurately burnished to drum diameter.
C2. Shoes improperly located within the drum causing too much toe or heel contact.
C3. Backing plates loose and shift under braking effort.
C4. Drums out-of-round.
C5. Drums weak and change shape when hot.
C6. Worn or scored drums.
C7. Too much axle roll caused by weak springs.
C8. Weak shock absorbers.
C9. Incorrect lining.
C10. Grease on lining.
C11. Lining loose on brake shoes.
C12. Unequal lining-to-drum clearance.
C13. Weak kick shackles allow too much axle shift.

BRAKES WON'T HOLD

A—HYDRAULIC BRAKES

A1. Master or wheel cylinders sticking.
A2. Fluid too thick or sluggish.

B—MECHANICAL BRAKES

B1. Mechanical linkage set wrong.
B2. Grooves worn on inside of conduit by cable sets up friction.
B3. Cross shaft incorrectly set.
B4. Pedal pull-rod set in wrong hole.

(CONTINUED ON NEXT PAGE)

TROUBLE SHOOTING GUIDE

BRAKES (CONTINUED)

C—ALL TYPES

C1. Lining not correctly burnished to drum diameter.
C2. Shoe not properly centered on drum.
C3. Grease on lining.
C4. Highly glazed lining.
C5. Drums tapered, poor contact between drum and lining.
C6. Anchors incorrectly set.
C7. Pull-back springs installed wrong.

BRAKES DRAG

A—HYDRAULIC BRAKES

A1. a. Sluggish fluid.
A2. b. Collapsed hose.
A3. c. Sticking cylinders.
A4. d. By-pass port blocked.

B—MECHANICAL BRAKES

B1. Mechanical linkage on rear wheel emergency brake set up too tight.
B2. Linkage set up too tight and shoes are pulled away from anchors.

C—ALL TYPES

C1. a. Shoe ledges worn or rusty.
C2. b. Frozen anchors, pins and bushings.
C3. c. Axle shift due to broken spring center bolt.
C4. d. Shoe guides too tight.
C5. e. Pull-back springs too weak.
C6. f. Loose wheel bearings.

DUE TO WET WEATHER

a. Drum dust forms paste when wet, causing loss of friction.
b. Drum dust absorbs moisture and clings to lining surface causing grab.
c. Water deposits in grooves of scored drums.

AIR BRAKE TROUBLE

A—SLOW PRESSURE BUILD-UP IN RESERVOIRS

A1. Leaking application of brake valve.
A2. Leaking compressor discharge valve.
A3. No clearance on unloader valve.
A4. Leaking lines or connections.
A5. Clogged air cleaner.
A6. Compressor piston and rings worn, carbon in discharge line.

B—QUICK RESERVOIR PRESSURE LOSS

B1. Leaking valves.
B2. Leaking governor.
B3. Worn and leaking compressor discharge valves.
B4. Tubing or connections leaking.

C—COMPRESSOR NOT UNLOADING

C1. Broken unloader diaphragm.
C2. Restriction in air line from governor to unloader.
C3. Governor not operating.
C4. Too much clearance on unloader valves.

D—SLOW BRAKE APPLICATION

D1. Low brake line pressure (brake valve to chambers).
D2. Brake chamber push-rod travel excessive.
D3. Restriction in lines.
D4. Leaking brake valve diaphragm.
D5. Leaking brake chamber diaphragm.
D6. Brake lining or drum condition.

E—SLOW BRAKE RELEASE

E1. Brake valve lever not returning fully to stop.
E2. Binding cam or camshafts.
E3. Brake chamber push-rod travel excessive.
E4. Restriction in tubing or hose.
E5. Improper seating of valves.
E6. Weak or broken return springs.

F—INEFFICIENT BRAKES

F1. Too much push rod travel on brake chambers.
F2. Lining and drum condition.
F3. Brake chamber diaphragm leaking.
F4. Low brake line pressure.

VACUUM BRAKE TROUBLES

SLOW BRAKE RELEASE

CAUSE

Diaphragm or cylinder pull rods bent or out of line cause binding.
Dirt clogged relay valve air cleaner.
Dirt in relay valve.
Weak or collapsed vacuum hose.
Restriction in control line.
Leak in check valve.

SEVERE TRAILER BRAKES

CAUSE

Defective or wrong type relay valve.
Power cylinders too large.
Hand valve improperly installed.
Non-graduated type of foot valve used.
No synchronizer valve.

SLOW TRAILER BRAKES

CAUSE

Power cylinder too small.
Moisture in line or relay valves.
Synchronizer valve improperly adjusted.
Synchronizer valve defective.

BRAKES INADEQUATE

CAUSE

Relay valve air cleaner clogged.
Too much travel of cylinder pull rod.
Synchronizer valve improperly adjusted.
Low vacuum.
Leaking brake cylinder or diaphragm chamber.
Insufficient leverage at power unit pull rod.
Diaphragm or cylinder pull rods bent or out of line cause binding.

AUTOMATIC APPLICATION

CAUSE

Collapsed brake hose.
Leaking check valve.
Air leak in system.

TIRES

In preparing this tire trouble shooting guide we have picked the more common causes for tire wear, and the factors affecting them. However in trouble-shooting your tire wear it is recommended that all these causes be checked regardless of type of wear.

DUE TO OVER-INFLATION

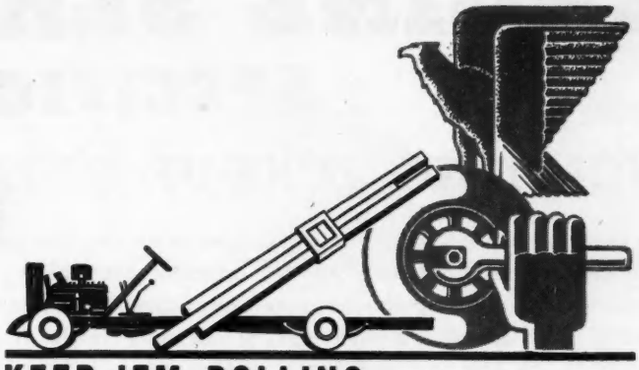
Abnormal center tread wear.
Crown breaks.
Bead failures.
X breaks in fabrics
Tread cracking.
Diagonal breaks.

CAUSES

Neglect of manufacturers' recommendations
No regular check of tires.
High speed driving.
Long steady driving.

(CONTINUED ON PAGE 120)

TRANSPORTATION ENGINEERING DATA



FORMULAS

VEHICLE SPEED

$$MPH = \frac{RPM \times R}{168 \times FGR}$$

MPH = Miles Per Hour
RPM = Engine Revolutions per Minute
R = Rolling Radius
FGR = Final Gear Ratio
168 = A constant comprising the conversion of rolling radius in inches to wheel circumference in feet; wheel revolutions per minute to wheel revolutions per hour; feet per hour to miles per hour

ENGINE SPEED

$$RPM = \frac{MPH \times 168 \times FGR}{R}$$

See above for abbreviations

GRADE ABILITY

$$GA = \frac{TE}{GVW} \text{ minus } .012$$

GA = Grade Ability
TE = Tractive Effort
GVW = Gross Vehicle Weight
.012 = 12 lb. per 1000 lb., rolling resistance on hard-surfaced roads

TRACTIVE EFFORT

$$TE = \frac{\text{lb. in. Torque} \times FGR \times .90}{R}$$

R = Rolling Radius in Inches
FGR = Final Gear Ratio
lb. in. Torque = 12 times Torque in lb. ft.
.90 = Efficiency for all rear axles except worm, then .85

DRAWBAR PULL

$$DP = \frac{.90 \times \text{lb. in. Torque} \times FGR}{R} - .012\ GVW$$

DP = Drawbar Pull
R = Rolling Radius in Inches
FGR = Final Gear Ratio
GVW = Gross Vehicle Weight
.90 = Efficiency for all rear axles except worm, then .85
lb. in. Torque = 12 times Torque in lb. ft.
.012 = 12 lb. per 1000 lb. Rolling Resistance

MAXIMUM NET ENGINE TORQUE

Torque in lb. ft. = .70 × cu. in. Piston Displacement. (This is approximate and should be used only when actual torque is not known.)
.70 = Average figure based on analysis of a number of torque curves

TORQUE AT PEAK HORSEPOWER

$$\text{Torque at Peak HP} = \frac{HP \times 5252}{RPM}$$

5252 = Constant resulting from the conversion of torque and RPM into horsepower
HP = Maximum net horsepower (See Horsepower below)
Peak HP = Maximum useful horsepower

MAXIMUM NET TORQUE

$$\text{Max. Net Torque} = \frac{\text{Torque at Peak HP} \times 5}{4}$$

(This is approximate and should be used only when actual net torque is not known.)
5 and 4 = Figures based on an analysis of a number of torque curves

PISTON DISPLACEMENT

Piston Displacement in cu. in. = B × B × .7854 × S × No. of Cylinders

B = Bore
S = Stroke
.7854 = Constant comprising the conversion of the area of a square to the area of a circle of the same dimensions

FINAL GEAR RATIO

$$FGR = \frac{R \times GVW \times (GA + .012)}{\text{lb. in. Torque} \times .90}$$

GA = Grade Ability
GVW = Gross Vehicle Weight
lb. in. Torque = 12 × lb. ft. Torque
R = Rolling Radius in Inches
.90 = Efficiency for all rear axles except worm, then .85
.012 = Rolling resistance on hard-surfaced roads

AMA HORSEPOWER

(For License Purposes Only)

$$AMA\ HP = \frac{B \times B \times \text{No. of Cyl.}}{2.5}$$

B = Cylinder Bore
2.5 = Constant based on average engine in 1906

HORSEPOWER

Maximum Net Horsepower (maximum gross horsepower less power consumed by engine accessories) is the only horsepower that should be used in transportation engineering formulas, and can be determined only by using a dynamometer

TIRE CAPACITIES

Tire and Rim Association Sizes, Loads and Pressures

Tire Size	No. of Plies	Lb. Pressure for Max. Load	Recommended Maximum Load Capacity (Lb.)
6.00-17	6	50	1250
6.00-20	6	50	1400
6.50-17	6	50	1500
6.50-18	6	50	1575
6.50-20	6	50	1700
7.00-17	8	55	1725
7.00-18	8	55	1800
7.00-20	8	55	1950
7.50-15	8	55	1825
7.50-17	8	55	2000
7.50-18	8	55	2100
7.50-20	8	55	2250
7.50-24	8	55	2250
8.25-15	10	60	2275
8.25-18	10	60	2550
8.25-20	10	60	2750
8.25-22	10	60	2950
8.25-24	10	60	3125
9.00-15	10	65	2875
9.00-18	10	65	3225
9.00-20	10	65	3450
9.00-22	10	65	3675
9.00-24	10	65	3925
10.00-15	12	70	3375
10.00-18	12	70	3775
10.00-20	12	70	4000
10.00-22	12	70	4275
10.00-24	12	70	4550
11.00-18	12	70	4200
11.00-20	12	70	4500
11.00-22	12	70	4750
11.00-24	12	70	5000
12.00-18	14	80	5125
12.00-20	14	80	5475
12.00-22	14	80	5800
12.00-24	14	80	6150
13.00-20	16	85	6750
13.00-24	16	85	7575
14.00-20	16	90	8200
14.00-24	16	90	9150

EXTRA PLY AND DUAL-MARKED TIRES

6.00-20 30x5	8	70	1700
6.00-24/34x5	8	70	1950
6.50-20/32x6	8	65	1950
7.00-20/32x6	10	70	2250
7.00-24/36x5	10	70	2575
7.50-15	10	75	2225
7.50-18/32x7	10	75	2500
7.50-20/34x7	10	75	2700
7.50-24/38x7	10	75	3100
8.25-15	12	75	2600
8.25-18	12	75	2925
8.25-20	12	75	3150
8.25-24	12	75	3600
9.00-15	12	80	3200
9.00-18	12	80	3600
9.00-20/36x8	12	80	3850
9.00-24/40x8	12	80	4375

ENGINE SERVICE
SPECIFICATIONS
INCLUDING TUNE-UP DATA . . . OIL PRESSURES . . .

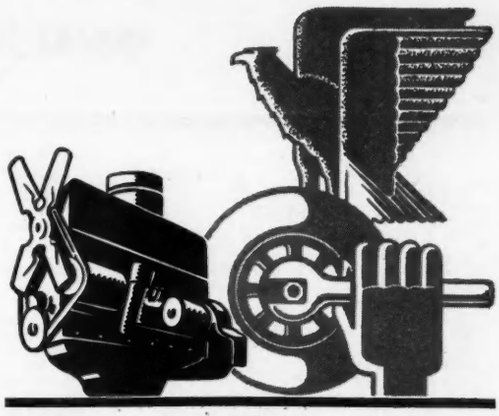
The information listed in these columns provides the mechanic or inspector with factory recommendations for adjustments which are a part of routine inspection as well as the heavier rebuilding operations. So far as Commercial Car Journal knows this is the only table that contains such information on the various truck engine models in such convenient form.

GUIDE TO SYMBOLS

Al—Aluminum
As—Strut Type Aluminum
Aa—Anodized Aluminum
CA—Cast Alloy
CI—Cast Iron
St—Alloy Steel
TP—Tin Plated Cast Iron
C—Cold

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After		Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted)		SPARK PLUG				Breaker Point Gap	Spark Occurs °TC B-Before A-After	Spark Occurs Fly-Wheel Teeth °TC B-Before A-After	Comp. Pressure at Cranking Speed
						°TC	Flywheel Teeth TC		Intake	Exhaust	Make	Type	Size	Gap				
AUTOCAR																		
RH, DF, RHT, DT, DFT, RHD, DP, 6D, DH, UD, UDF, UDT, UDP, 6RH, 6DF, 6UD, UDFT	Own 358	6-4x4¾	Ala	Top	40-2200	TC	TC	.020	.015	.018	Ch	2 COM	⅞	P	D	8½°B	1 7/16B	98
N, NT, 6N, UN, UNT, 6UN, 4X4DF, 4X4N	Own 404	6-4¼x4¾	Ala	Top	40-2200	TC	TC	.020	.015	.018	Ch	2 COM	⅞	P	Z	2°B	¼B	95
NF, NFT, 6NF, UNF, UNFT, 6UNF, S, US, N6OC, 4X4NF	Own 453	6-4½x4¾	Ala	Top	40-2200	TC	TC	.020	.015	.018	Ch	2 COM	⅞	P	Z	2°B	¼B	95
TF, TFT, 6TF	Wau 6RB	6-5x5¾	Ala	Top	40-1750	10°A	3¾A	.020	.006	.010	Ch	2 COM	⅞	P	Z	9°B	3½B	80
RM, RL, RMT (1937)	Own 315	6-3¾x4¾	Ala	Top	40-2200	TC	TC	.020	.015	.018	Ch	8 COM	18mm	P	D	8½°B	1 7/16B	98
DP, D, ITR, 6X2RL, RLD, UD, IUTR, UPD, 6X2UD (1937)	Own 358	6-4x4¾	Ala	Top	40-2200	TC	TC	.020	.015	.018	Ch	O	⅞	P	D	8½°B	1 7/16B	98
DF, 2TR, 6X2DF, DH, UDF, 2UTR, 6XEUN, 4X4DF, 4X4N, 6X4DF (1937)	Own 404	6-4¼x4¾	Ala	Top	40-2200	TC	TC	.020	.015	.018	Ch	O	⅞	P	Z	2°B	¼B	95
6X2UNF, 3UTR, 4UTR, 3TR, 4TR, 6X2NF, C, 4X4NF (1937)	Own 453	6-4½x4¾	Ala	Top	40-2200	TC	TC	.020	.015	.018	Ch	O	⅞	P	Z	2°B	¼B	95
5T, UT, UTT, 6UT, N75C, 4X4S (1936-37), C, T, TT, 6X3T, 6X2UT, 5TR, 5UTR, 6X4TO, 6X4UTO, 6X4UTD, 6X4TC, 6X4TD	Own 501	6-4¼x5¼	Ala	Top	40-2200	TC	TC	.020	.015	.018	Ch	8 COM	18mm	P	Z	2°B	¼B	95
A, UA, C10, C10T, U10, U10T	Her JXR	6-3⅝x4¼	Ala	Top	35-2600	2°A	.....	.010	.008	.006	Ch	O	⅞	P	Z	TC	TC	95
B, UB, C20, C20T, U20, U20T	Her JXC	6-3 1/16x4¼	Ala	Top	35-2600	2°A	.....	.010	.008	.006	Ch	O	⅞	P	Z	TC	TC	95
RB, URB	Own 315	6-3¾x4¾	Ala	Top	40-2200	TC	TC	.018	.015	.018	Ch	8 COM	18mm	P	D	9°B	1¼B	98
RL, RLS, ITR, RLD, DP, 6X2RL, URL, URLS, UD, IUTR, UDP, 6X2UD	Own 358	6-4x4¾	Ala	Top	40-2200	TC	TC	.018	.015	.018	Ch	2 COM	⅞	P	.....	9°B	1¼B	98
DF, N, 2TR, DH, 6X2DF, 6X4DF, UDF, UN, 2UTR, 6X2UN, 4X4DF	Own 408	6-4 1/16x5¼	Ala	Top	40-2200	TC	TC	.018	.015	.018	Ch	8 COM	18mm	P	.....	2°B	¼B	95
NF, 3TR, 4TR, S, 6X2NF, UNF, 3UTR, 4UTR, US, 6X2UNF, 4X4N	Own 447	6-4¼x5¼	Ala	Top	40-2200	TC	TC	.018	.015	.018	Ch	8 COM	18mm	P	.....	2°B	¼B	95
C30, C30T, U30, U30T	Own 315	6-3¾x4¾	Ala	Top	40-2600	TC	TC	.020	.015	.018	Ch	8 COM	18mm	P	D	6°B	1 7/16B	98
C30, C30T, U30, U30T (1941)	Own 331	6-3¾x5	Ala	Top	40-2600	TC	TC	.020	.015	.018	Ch	8 COM	18mm	P	D	6°B	1 7/16B	98
C40, C40T, C40D, C4062, C4064, U40, U40T, U40D, U4062, C50, C50D, U50, C60, U60, U60D	Own 358	6-4x4¾	Ala	Top	40-2600	TC	TC	.020	.015	.018	Ch	8 COM	18mm	P	D	6°B	1 7/16B	98
C40, C40T, C40D, C4062, C4064, U40, U40T, U40D, U4062, C50T, C50D, U50, C60, U60, U60D (1941)	Own 377	6-4x5	Ala	Top	40-2600	TC	TC	.020	.015	.018	Ch	8 COM	18mm	P	D	2°B	¼B	95
C60T, C6044, C70, C70D, C7062, C7064, U60T, U70, U7062, U7064	Own 408	6-4 1/16x5¼	Ala	Top	40-2400	TC	TC	.020	.015	.018	Ch	8 COM	18mm	P	D	2°B	¼B	95
C7044, C70T, C80, C80T, C80D, C8062, U70T, U80, U80T, U80D, U8062	Own 447	6-4¼x5¼	Ala	Top	40-2400	TC	TC	.018	.015	.018	Ch	8 COM	18mm	P	D	2°B	¼B	95
C8064, C8044, C90, C90T, C90D, C9062, C9064, U90, U90T, U90D, U8064, U9062, U9064	Own 501	6-4½x5¼	Ala	Top	40-2400	TC	TC	.020	.015	.018	Ch	8 COM	18mm	P	D	2°B	¼B	95
C9044	Her HXB	6-5x6	Ala	Top	40-2600	TC	TC	.....	.015	.018	Ch	8 COM	18mm	P	E	TC	TC	95
DC100T, DC100D, DC10044, DC10062, DC10064, DU100T, DU10062, DU10064	Cum	6-4 7/16x6	CI	Top	40-1900	.....	.....	.....	.012	.012	.....	.....	.....	.....	.....	.....	.....	.....
BANTAM																		
(1938-39)	Own	4-2x3	Al	Top	8.5-30	19°B	4¼	.011	.011	.012	Ch	HIO	14mm	.025	.022	TC	TC	120
(1940)	Own	4-2¼x3⅛	A	Top	30-50	19°B	4¼	.011	.011	.012	Ch	HIO	14mm	.025	.022	4°B	.....	135
BROCKWAY																		
78 (1936-40)	Con24B	6-3 1/16x4¾	CI	Top	20-20	2°B	½B	.015	.010	.010	Ch	8 COM	18mm	.025	.020	8°B	2½B	95
87, 90X (1936)	Con 28B	6-3⅝x4⅝	Al	Top	20-20	5°B	1½B	.012	.008	.010	Ch	0 COM	⅞	.025	.020	5°B	1½B	95
83, 88, 92, 94 (1936-40)	Con 25B	6-3 1/16x4⅝	Al	Top	20-20	5°B	1½B	.012	.008	.010	Ch	8 COM	18mm	.025	.020	5°B	1½B	95
125X (1936-40)	Con 31B	6-3½x4½	CI	Top	30-20	8°B	2¾B	.015	.012	.012	Ch	8 COM	18mm	.025	.020	8½°B	3B	90
96, 110, 130 (1936-40)	Con 29B	6-3 1/16x4½	CI	Top	30-20	8°B	2¾B	.015	.012	.012	Ch	8 COM	18mm	.025	.020	8½B	3B	90
145 (1936-40)	Con 31B	6-3½x4½	CI	Top	30-20	8°B	2¾B	.015	.012	.012	Ch	8 COM	18mm	.025	.020	8½°B	3B	90
150X4, 150X5 (1936-40)	Con 32B	6-4 1/16x4½	CI	Top	30-20	8°B	2¾B	.015	.012	.012	Ch	8 COM	18mm	.025	.020	8½°B	3B	90
160X, 180XSBT, 165X (1936-40)	Con 32B	6-4 1/16x4½	Al	Top	30-20	8°B	2¾B	.015	.012	.012	Ch	8 COM	18mm	.025	.020	8½°B	3B	90
170X (1936-40)	Con 33B	6-4 1/16x4¾	Al	Top	30-20	5°B	2B	.014	.012	.015	Ch	8 COM	18mm	.025	.020	15°B	5½B	82
175X, 180X-SBT Spec., 220X (1936-40)	Con 34B	6-4⅝x4¾	Al	Top	30-20	5°B	2B	.014	.012	.015	Ch	8 COM	18mm	.025	.020	15°B	5½B	82
195X (1936-40)	Con 33B	6-4 1/16x4¾	Al	Top	30-20	5°B	2B	.014	.012	.015	Ch	8 COM	18mm	.025	.020	15°B	5½B	82
240X, 280X (1936-40)	Con 35B	6-4½x5¼	Al	Top	30-20	5°B	2B	.014	.012	.015	Ch	8 COM	18mm	.025	.020	15°B	5½B	82
112, 128 (1936-40)	Con 38B	6-3⅝x4⅝	Al	Top	30-20	8°B	2¾B	.015	.012	.012	Ch	8 COM	18mm	.025	.020	8½°B	3B	90
76 (1941)	Con 24B	6-3 1/16x4⅝	CI	Top	35-2000	TC	TC	.014	.014C	.014C	Ch	6 COM	18mm	.025	.020	TC	.....	.....
83, 88, 92, 94 (1941)	Con 25B	6-3 1/16x4⅝	Al	Top	40-2000	TC	TC	.014	.014C	.014C	Ch	6 COM	18mm	.025	.020	6°B	.....	.....
112-128 (1941)	Con 38B	6-3½x4⅝	Al	Top	40-2000	6½°B	.....	.0175	.017C	.024C	Ch	6 COM	18mm	.025	.020	6°B	.....	.....
146, 147, 152 (1941)	Con 40B	6-4x4⅝	Al	Top	40-2000	6½°B	.....	.0175	.017C	.024C	Ch	6 COM	18mm	.025	.020	6°B	.....	.....
153, 154, 162 (1941)	Con 41B	6-4 1/16x4⅝	Al	Top	55-2500	6½°B	.....	.022	.017C	.024C	Ch	6 COM	18mm	.025	.020	6°B	.....	.....
156, 166 (1941)	Con 42B	6-4⅛x4⅝	Al	Top	55-2500	6½°B	.....	.022	.017C	.024C	Ch	6 COM	18mm	.025	.020	6°B	.....	.....
170X, 195X (1941)	Con 33B	6-4 1/16x4¾	Al	Top	30-2300	5°B	.....	.014	.018C	.018C	Ch	6 COM	18mm	.025	.020	15°B	.....	.....
175X, 220X (1941)	Con 34B	6-4⅝x4¾	Al	Top	30-2300	5°B	.....	.014	.018C	.018C	Ch	6 COM	18mm	.025	.020	15°B	.....	.....
240X, 280X (1941)	Con 35B	6-4½x5¼	Al	Top	30-2300	5°B	.....	.014	.018C	.018C	Ch	6 COM	18mm	.025	.020	15°B	.....	.....
CHEVROLET																		
½, 1½ Ton (1934)	Own	6-3 1/16x4	CI	Top	.....	4°B	1½B	.006	.006	.013	AC	K10	14mm	.032	.018	10°B	3½B	83
½, 1½ Ton (1935)	Own	6-3 1/16x4	CI	Top	.....	8°B	3B	.006	.006	.013	AC	K11	14mm	.032	.018	5°B	1¾B	86
½, 1½ Ton (1936)	Own	6-3 1/16x4	CI	Top	.....	8°B	3¼B	.006	.006	.013	AC	K11	14mm	.032	.018	5°B	1¾B	112
½, 1½ Ton (1937)	Own	6-3½x3¾	CI	Top	13½-2621	8°B	3½B	.006	.006	.013	AC	K11	14mm	.040	.018	5°B	5°B	90
¼, ¾, 1, 1½ Ton (1938)	Own	6-3½x3¾	CI	Top	13½-2621	8°B	3½B	.006	.006	.013	AC	46	14mm	.040	.018	5°B	2B	90

. . . CONNECTING ROD DATA



KEEP 'EM ROLLING

AND ABBREVIATIONS

Bot—Bottom
Top—Top
AC—AC
AL—Auto-Lite
Ch—Champion
*—Severe Service
Q—Qts.
Bud—Buda
Cat—Caterpillar
Con—Continental
Cum—Cummins
Her—Hercules
Lyc—Lycoming
Opt—Optional
Var—Variable
Wau—Waukesha
A—.019-.023
S—.023-.028
B—If spark plus is J9 (14mm), breaker point gap is .018-.022
Z—.018-.022
ZZ—.025-.030
V—.012-.014
Y—.011-.012C
YY—.014-.016
SS—Semi-Steel
COM—Commercial
H—.015-.025
E—.018-.020
D—.018-.024
K—.020-.025
P—.018-.023
R—.028-.032

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After °TC	Intake Valve Opens B-Before A-After Flywheel Teeth TC	Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted) Intake	OPERATING TAPPET CLEARANCE (Hot unless noted) Exhaust	SPARK PLUG Make	SPARK PLUG Type	SPARK PLUG Size	SPARK PLUG Gap	Breaker Point Gap	Spark Occurs °TC A-After B-Before	Spark Occurs Fly-Wheel Teeth °TC A-After B-Before	Comp. Pressure at Cranking Speed
CHEVROLET—Continued																		
½, ¾, 1, 1½ Ton (1939)	Own	6-3½x3¾	CI	Top	1311-2621	9°B	3½B	.006	.006	.013	AC	44	14mm	.040	.018	5°B	2B	90
½, ¾, 1, 1½ Ton (1940)	Own	6-3½x3¾	CI	Top	14-2000	3°B	1⅛B	.006	.006	.013	AC	44	10mm	.040	.018	5°B	2B	90
½, ¾, 1, 1½ Ton (1941-42)	Own	6-3½x3¾	CI	Top	14-2000	3°B	1⅛B	.006	.006	.013	AC	104	10mm	.040	.018	5°B	2B	90
CORBITT																		
12B (1936)	Wau 6RL	6-3½x4¼	Al	Top	40-1500	TC	TC	.010	.010-.012	.010-.012	AC	D8-D10	18mm	.030	.025	5°B	.....	112
F15, 14B (1936-37)	Wau 6BK	6-3⅝x4¼	Al	Top	40-1500	TC	TC	.010	.012-.014	.012-.014	AC	D8-D10	18mm	.030	.025	5°B	.....	112
14BT, Series 18, F18, Series 22 (1936-37)	Wau 6MK	6-4¼x4¾	CI	Top	40-1500	7°A	.....	.006	.008-.010	.012-.014	AC	D8-D10	18mm	.030	.025	7°B	.....	89
Series 27D (1936)	Wau 6SRL	6-4⅝x5½	Al	Top	40-1500	6°A	.....	.099	.088-.010	.016-.018	AC	L8-L10	⅞	.030	.025	TC	TC	80
F27, Series 35, 40 (1936-37)	Wau 6SRK	6-4⅝x5½	Al	Top	40-1500	7°A	.....	.006	.008-.010	.016-.018	AC	L8-L10	⅞	.030	.025	7°B	.....	80
F12 (1936)	Wau 6BL	6-3½x4¼	Al	Top	40-1500	TC	TC	.010	.010-.012	.010-.012	AC	D8-D10	18mm	.030	.025	5°B	.....	112
F23 (1936)	Wau 6SRL	6-4⅝x5½	Al	Top	40-1500	6°A	.....	.009	.008-.010	.016-.018	AC	L8-L10	⅞	.030	.025	TC	TC	80
F35 (1936)	Wau 6RB	6-5x5¼	Al	Top	40-1500	9°A	.....	.006	.009-.010	.016-.018	AC	L8-L10	⅞	.030	.025	7°B	.....	81
12B (1937)	Lyc WFC	6-3 1/16x4¼	Al	Top	40-1500	TC	TC	.010	.010-.012	.010-.012	AC	KL-8	14mm	.030	.025	5°B	.....	112
18BT, 22B (1937)	Wau 6MZ	6-4¼x4¾	Al	Top	40-1500	7°A	.....	.006	.008-.010	.012-.014	AC	D8-D10	18mm	.030	.025	7°B	.....	89
22BT, F23 (1937)	Con 20-R	6-4½x4¾	Al	Top	40-1500	5°B	1.9	.01365	.010-.012	.017-.018	AC	.....	18mm	.030	.025	.....	.....	.....
27DT (1937)	Con 21-R	6-4⅝x4¾	Al	Top	40-1500	5°B	1.9	.01365	.010-.012	.017-.018	AC	.....	18mm	.....	.....	.....	.....	.....
13B, F12 (1937-41)	Con A6244	6-3 1/16x4¾	Al	Top	40-1500	5°B	1⅛B	.012	.010	.012	AC	D8-D10	18mm	.030	.025	5°B	1½B	.....
17B, 14BT, F12 (1937-41)	Con M6290	6-3⅝x4¾	Al	Top	40-1500	5°B	1⅜B	.012	.010	.012	AC	D8-D10	18mm	.030	.025	5°B	1¾B	.....
21B, F18 (1937-41)	Con E602	6-4⅛x4½	Al	Top	40-1500	8°B	2⅛B	.012	.007	.012	AC	D8-D10	18mm	.030	.025	8°B	2⅝B	102
26D, 18BT (1937-41)	Con E603	6-4¼x4½	Al	Top	40-1500	8°B	2⅛B	.012	.007	.012	AC	D8-D10	18mm	.030	.025	8°B	2⅝B	99
22BT, F27 (1937-41)	Con 21R	6-4⅝x4¾	Al	Top	40-1500	5°B	2B	.014	.012	.015	AC	D8-D10	18mm	.030	.025	10°B	3¼B	78
27DT, F35 (1937-41)	Con 22R	6-4½x5½	Al	Top	40-1500	5°B	2B	.014	.012	.015	AC	D8-D10	18mm	.030	.025	10°B	3¼B	78
F14 (1937-39)	Con M6271	6-3⅝x4⅜	Al	Top	40-1500	5°B	1⅜B	.....	.....	.....	AC	D8-D10	18mm	.030	.025	5°B	1¾B	.....
17BT, F19 (1937-41)	Con M6330	6-4x4⅜	Al	Top	40-1500	5°B	1⅜B	.012	.010	.012	AC	D8-D10	18mm	.030	.025	5°B	1¾B	.....
F23 (1941)	Con 20R	6-4¼x4¾	Al	Top	40-1500	5°B	2B	.014	.012	.015	AC	D8-D10	18mm	.030	.025	10°B	3¼B	.....
D18BT (1940-41)	Con A600	6-4x5	CI	Top	40-1500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
D27BT (1940-41)	Con HB6	6-4⅞x6	CI	Top	40-1500	.....	.....	.....	.012	.012	.....	.....	.....	.....	.....	.....	.....	.....
DIAMOND T																		
211, 227, 243, 212A, 212B, 228, 401, 402, 404, 405 (1935-1938)	Her JXA	6-3⅜x4¼	CI	Top	25-30	5°A	1⅛A	.006	.008	.010	AC	76	⅞	.027	.020	TC	TC	96½
220, 311, 221, 244, 313, 406, 507, 509, 611 (1935-38)	Her JXB	6-3⅝x4¼	Al	Top	25-30	5°A	1⅛A	.006	.008	.010	AC	76	⅞	.027	.020	TC	TC	103
312, 351C, 320, 353, 607, 612. 613 (1935-38)	Her JXC	6-3⅝x4¼	Al	Top	25-30	5°A	1⅛A	.006	.008	.010	AC	76	⅞	.027	.020	TC	TC	102
352, 360, 614 (1935-38), 614, 614C (1939)	Her JXD	6-4x4¼	Al	Top	25-30	5°A	1⅛A	.006	.008	.010	AC	76	⅞	.027	.020	TC	TC	109
412B (1935)	Her WXLC	6-4x4⅜	Al	Top	25-30	2°A	⅛A	.010	.006	.010	AC	76	⅞	.027	.020	TC	TC	108
412DR, 512B, 512DR (1935-38), 803C, 804C (1939)	Her WXLC3	6-4¼x4⅜	Al	Top	25-30	2°A	⅛A	.010	.008	.010	AC	76	⅞	.027	.020	TC	TC	100
80, 301 (1936-38), 201, 201C (1939)	Her QXB3	6-3¼x4⅛	CI	Top	25-30	5°A	1⅛A	.006	.006	.008	AC	75	⅞	.027	.020	TC	TC	.....
304, 401 (1937-38), 305, 305C, 306, 306C (1939)	Her QXC3	6-3⅝x4⅛	Al	Top	25-30	5°A	1⅛A	.006	.006	.008	AC	75	⅞	.027	.020	TC	TC	.....
404, 404C (1939)	Her JXE3	6-3½x4¼	Al	Top	25-30	5°A	1⅛A	.....	.006	.008	AC	73	⅞	.027	.020	TC	TC	.....
406, 509, 509C (1939)	Her JXB	6-3⅝x4¼	Al	Top	25-30	5°A	1⅛A	.006	.008	.010	AC	73	⅞	.027	.020	TC	TC	.....
612, 612C (1939)	Her JXC	6-3⅝x4¼	Al	Top	25-30	5°A	1⅛A	.006	.008	.010	AC	73	⅞	.027	.020	TC	TC	.....
201 (1940-41)	Her QXB3	6-3¼x4⅛	CI	Top	25-35	5°A	1⅛A	.006	.006	.008	AC	44	14mm	.027	.020	TC	TC	.....
305, 306, 306SC (1940-41)	Her QXC3	6-3⅝x4⅛	Al	Top	25-35	5°A	1⅛A	.006	.006	.008	AC	44	14mm	.027	.020	TC	TC	.....
404, 404SC (1940)	Her JXE3	6-3½x4¼	Al	Top	25-35	2°A	¾A	.010	.006	.010	AC	44	14mm	.027	.020	TC	TC	.....
406, 509, 509C (1940-41)	Her JXB	6-3⅝x4¼	Al	Top	25-35	2°A	¾A	.010	.008	.010	AC	44	14mm	.027	.020	TC	TC	.....
612, 612C (1940-41)	Her JXC	6-3⅝x4¼	Al	Top	25-35	2°A	¾A	.010	.008	.010	AC	44	14mm	.027	.020	TC	TC	.....
614, 614C (1940-41)	Her JXD	6-4x4¼	Al	Top	25-35	5°A	¾A	.010	.006	.010	AC	44	14mm	.027	.020	TC	TC	.....
404C (1940-41)	Her JXE3	6-3½x4¼	Al	Top	25-35	2°A	¾A	.010	.008	.010	AC	44	14mm	.027	.020	TC	TC	.....
803C, 804C, 805, 806 (1940-41)	Her WXLC3	6-4¼x4⅜	Al	Top	25-35	5°A	1⅛A	.010	.006	.010	AC	44	14mm	.027	.020	TC	TC	.....
900 (1940-41)	Her RXLC3	6-4⅝x5½	Al	Top	25-35	2°A	¾A	.010	.006	.010	AC	44	14mm	.027	.020	TC	TC	.....
201, 308, 308SC (1941-42)	Her QXD3	6-3 1/16x4⅛	Al	Top	25-35	5°A	.....	.006	.006	.010	AC	44	14mm	.027	.020	TC	TC	.....
DODGE																		
KC, KCL, KH, Series LC	Own 201 cu in.	6-3½x4⅜	Al	Top	30-40-30	6°A	2⅛A	.011	.006	.008	AC	K9	14mm	.025	.020	3°A	1¼A	.....
K32, K33, K34	Own 217 cu.in.	6-3¼x4⅜	As	Top	30-40-30	6°A	2⅛A	.011	.006	.008	AC	K9	14mm	.025	.020	2°A	¾A	.....
K35, K36, K37, K38, K45, K46, K47, K48	Own 241 cu.in.	6-3⅝x4½	Al	Top	30-40-30	TC	TC	.011	.006	.008	AC	K9	14mm	.025	.020	TC	TC	.....
K50, K51, K52, K70, K71, K72	Own 309 cu.in.	6-3⅝x5	As	Top	30-40-30	6°A	2⅛A	.010	.008	.010	AC	K9	14mm	.025	.020	4°B	1½	.....
LE Series	Own 201 cu.in.	6-3¼x4⅜	As	Top	30-40-30	6°A	2⅛A	.011	.006	.010	AC	K9	14mm	.025	.020	3°A	1¼A	.....
LF Series	Own 217 cu.in.	6-3¼x4⅜	As	Top	30-40-30	6°A	2⅛A	.011	.006	.010	AC	K9	14mm	.025	.020	2°A	¾A	.....
LG, LH Series	Own 241 cu.in.	6-3⅝x4½	Al	Top	30-40-30	TC	TC	.010	.006	.010	AC	K9	14mm	.025	.020	TC	TC	.....
K50V, K51V, K52V, K60V, K61V, K62V	Own 309 cu.in.	6-3⅝x5	As	Top	30-40-30	6°A	2⅛A	.010	.008	.010	AC	K9	14mm	.025	.020	3°B	1½B	.....
MC, RC (1937-38)	Own 218 cu.in.	6-3⅝x4 1/16	Aa	Top	30-40-30	TC	TC	.014	.008	.012	Ch	J8	14mm	.025	.020	TC	TC	.....
RD, MD Series (1937-38)	Own 218 cu.in.	6-3⅝x4 1/16	Aa	Top	30-40-30	TC	TC	.014	.008	.012	Ch	J8	14mm	.025	.020	TC	TC	.....
RE, ME Series (1937-38)	Own 218 cu.in.	6-3⅝x4 1/16	Aa	Top	30-40-30	TC	TC	.014	.008	.012	Ch	J8	14mm	.025	.020	4°B	1½B	.....
RF, MF Series (1937-38)	Own 228 cu.in.	6-3 1/16x4¼	Aa	Top	30-40-30	TC	TC	.014	.008	.012	Ch	J8	14mm	.025	.020	4°B	1½B	.....
RG, RH, MG, MH Series (1937-38)	Own 241 cu.in.	6-3⅝x4½	Aa	Top	30-40-30	TC	TC	.014	.008	.012	Ch	J8	14mm	.025	.020	6°B	2½B	.....
RL, RK, RO, RP, ML, MK Series (1937-38)	Own 333 cu.in.	6-3⅝x5	Aa	Top	30-40-30	6°A	2⅛A	.011	.008	.012	Ch	J8	14mm	.025	.020	6°B	2½B	.....
TC (1939)	Own 201 cu.in.	6-3¼x4⅜	Aa	Top	30-40-30	6°A	2⅛A	.014	.006	.010	Al	A7	14mm	.025	.020	TC	TC	116
TD (1939)	Own 218 cu.in.	6-3¼x4⅜	As	Top	30-40-30	6°A	2⅛A	.014	.006	.010	Ch	J8	14mm	.025	.020	TC	TC	108
TE (1939)	Own 218 cu.in.	6-3⅝x4 1/16	Aa	Top	30-40-30	8°B	3A	.014	.008	.012	Ch	J8	14mm	.025	.020	2°B	¾B	115
TF (1939)	Own 228 cu.in.	6-3⅝x4¼	Aa	Top	30-40-30	8°B	3A	.014	.008	.012	Ch	J8	14mm	.025	.020	4°B	1½B	115
TG, TH (1939)	Own 241 cu.in.	6-3⅝x4½	Aa	Top	30-40-30	8°B	3A	.014	.008	.012	Ch	J8	14mm	.025	.020	6°B	2½B	115
TL, TK (1939)	Own 331 cu.in.	6-3¾x5	As	Top	30-40-30	6°A	2A	.014	.006	.012	Al	A7	14mm	.025	.020	2°B	¾B	88
TLD, TKD (1939)	Own 331 cu.in.	6-3¾x5	As	Top	30-40-30	31°B	.....	.017	.013	.013	.....	.....	Diesel	.....	.....	.....	.....	.....

CONTINUED ON NEXT PAGE

ENGINE SERVICE SPECIFICATIONS — Continued

(Key to Abbreviations on pages 36 and 37)

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After		Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted)		SPARK PLUG				Breaker Point Gap	Spark Occurs °TC B-Before A-After	Spark Occurs Fly-Wheel Teeth °TC B-Before A-After	Comp. Pressure at Cranking Speed
						°TC	Flywheel Teeth TC		Intake	Exhaust	Make	Type	Size	Gap				
DODGE—Continued																		
VC (1940)	Own 201 cu.in.	6-3 1/16x4 3/8	AlTp	Top	30–40–30	6°A	2 1/16A	.014	.006	.010	Al	A7	14mm	.025	.020	TC	TC	115
VD (1940)	Own 218 cu.in.	6-3 1/16x4 5/8	As	Top	30–40–30	6°A	2 1/16A	.014	.006	.010	Al	A7	14mm	.025	.020	TC	TC	113
VF, VM (1940)	Own 228 cu.in.	6-3 5/16x4 1/4	AlTp	Top	30–40–30	12°B	5B	.014	.008	.012	Al	A7	14mm	.025	.020	TC	TC	120
VG, VH (1940)	Own 241 cu.in.	6-3 5/16x4 1/2	AlTp	Top	30–40–30	12°B	5B	.014	.008	.012	Al	A7	14mm	.025	.020	TC	TC	120
VL, VK, WL, WK (1940-41)	Own 331 cu.in.	6-3 3/4x5	As	Top	30–40–30	6°A	2 1/16A	.014	.008	.012	Ch	J8	14mm	.025	.020	2°A	3/4A	98
VLD, VKD, WLD, WKD (1940-41)	Own 331 cu.in.	6-3 3/4x5	As	Top	30–40–30	31°B	15B	.017	.013	.013			Diesel					
WC (1941)	Own 201 cu.in.	6-3 1/16x4 3/8	Al	Top	30–40–30	9°B		.014	.008	.010	Al	A7A	14mm	.025	.020	TC	TC	118
WD (1941)	Own 218 cu.in.	6-3 1/16x4 5/8	Al	Top	30–40–30	9°B		.014	.008	.010	Al	A7A	14mm	.025	.020	TC	TC	113
WF, WFM (1941)	Own 228 cu.in.	6-3 5/16x4 1/4	Al	Top	30–40–30	12°B	5B	.014	.008	.012	Al	A7A	14mm	.025	.020	TC	TC	120
WG, WH, WGM, WHM (1941)	Own 241 cu.in.	6-3 5/16x4 1/2	Al	Top	30–40–30	12°B	5B	.014	.008	.012	Al	A7A	14mm	.025	.020	TC	TC	120
WC, WD15 (1942)	Own 217.7	6-3 1/16x4 3/8	Cl	Top	30–40–30	12°B	5B	.014	.008	.010	Al	A7	14mm	.025	.020	3°B		130
WD20, WD21 (1942)	Own 230.2	6-3 1/16x4 5/8	Cl	Top	30–40–30	12°B	5B	.014	.008	.010	Al	A7	14mm	.025	.020	2°A		130
WF, WFM (1942)	Own 236.6	6-3 5/16x4 1/4	Cl	Top	30–40–30	12°B	5B	.014	.008	.012	Al	A7	14mm	.025	.020	TC		130
WG, WH, WGM, WHM (1942)	Own 250.6	6-3 5/16x4 1/2	Cl	Top	30–40–30	12°B	5B	.014	.008	.012	Al	A7	14mm	.025	.020	2°A		130
WL, WK (1942)	Own 231.3	6-3 3/4x5	As	Top	30–40–30	6°A	2 1/16A	.014	.008	.012	Ch	J8	14mm	.025	.020	2°A		98
WLD, WKD (1942)	Own 331.3	6-3 3/4x5	As	Top	30–40–30	31°B		.017	.0135	.0135								
FEDERAL																		
15X, 15, 15K, 75, 75H, 75K	Her JXA	6-3 5/16x4 1/4		Top	25–1500	5°A	1 1/16A	.006	.008	.010	AC		7/8	.025	.020	TC	TC	
18X, 18K, 20, 20K, 21, 22, 80, 80H, 80K	Her JXB	6-3 5/8x4 1/4		Top	25–1500	5°A	1 1/16A	.006	.008	.010	AC		7/8	.025	.020	TC	TC	
25, 25K, 85, 85H, 85K	Her JXC	6-3 5/8x4 1/4		Top	25–1500	5°A	1 1/16A	.006	.008	.010	AC		7/8	.025	.020	TC	TC	
30	Wau 6MS	6-3 1/4x4 3/4	Cl	Top	35–1500	8°A	3A	.004	.010	.012	AC	86	18mm	.025	.020	TC	TC	80
40, 40F	Wau 6MK	6-4 1/4x4 3/4	Cl	Top	35–1500	8°A	3A	.004	.010	.012	AC	86	18mm	.025	.020	TC	TC	80
50, 50F	Wau 6MZ	6-4 1/4x4 3/4	Cl	Top	35–1500	8°A	3A	.004	.010	.012	AC			.025	.020	TC	TC	80
63, 66, C7, C8, C7W, C8W, C8H	Wau 6SRK	6-4 5/8x5 1/8		Top	35–1500	10°A	3 1/16A	.004	.010	.012	AC	1/8	7/8	.025	.020	TC	TC	80
DM (1936)	Con W10	4-3 7/8x4 1/4									AC			.025	.020	TC	TC	
10	Her OOB	4-3 3/4x4 1/2		Top	16–1100	5°A		.008	.008	.012	AC	1/8	1/8	.025	.020	TC	TC	
28	Her JXC	6-3 5/8x4 1/4		Top	26–2600	5°A			.008	.010	AC	1/8	1/8	.025	.020	TC	TC	
29, 29K, 87H, 89, 89K	Her JXD	6-4x4 1/4		Top	26–2600	5°A			.008	.010	AC	1/8	1/8	.025	.020	TC	TC	
40DR	Wau 6MK	6-4 1/4x4 3/4	Cl		35–1500	8°A	3A		.008	.016	AC		1/8	.025	.020	TC	TC	
T10B, T10W	Con 18R	6-4x4 1/2		Top	35–1500						AC		1/8	.025	.020	TC	TC	
X8RDR-X8R, 7, 7M	Wau 6SRK	6-4 5/8x5 1/8		Top	35–1500	10°A	3A	.004	.008	.016	AC	1/8	1/8	.025	.020	TC	TC	80
9	Con 4140	4-3 1/16x4 3/8	Cl	Top	25–1500	TC	TC	.014	.010	.012	AC	86	18mm	.025	.020	TC	TC	
11, 11K, 11H	Her QXB3	6-3 1/4x4 1/2		Top	25–1500				.006	.008	AC		7/8	.025	.020	TC	TC	
12K, 14K	Her QXC3	6-3 5/8x4 1/2	Al	Top	25–1500			.008	.006	.008	AC		7/8	.025	.020	TC	TC	
62, 65	Con 22R	6-4 1/2x5 1/4	Al	Top	25–1500			.014	.013	.018	AC	88	18mm	.025	.020	TC	TC	78
8, 11, M8, M11 (1940-42)	Her QXB	6-3 1/4x4 1/2	Cl	Top	40–2500	5°B		.006	.006	.008	AC	44	14mm	.025	.020	10°B	3B	
12, 14, M12, M14 (1940)	Her QXC	6-3 5/8x4 1/2	Cl	Top	40–2500	5°B		.006	.006	.008	AC	44	14mm	.025	.020	10°B	3B	
15, 75 (1940)	Her JXA	6-3 5/8x4 1/4	Al	Top	40–2500	5°A		.008	.006	.006	AC	44	14mm	.025	.020	10°B	3B	98
18, 20, 80 (1940-42)	Her JXB	6-3 5/8x4 1/4	Al	Top	40–2500	5°A		.008	.006	.006	AC	44	14mm	.025	.020	10°B	3B	98
25, 85 (1940-42)	Her JXC	6-3 5/8x4 1/4	Al	Top	40–2500	5°A		.008	.006	.006	AC	44	14mm	.025	.020	10°B	3B	98
29, 29H, 89, 89H (1940-42)	Her JXD	6-4x4 1/4	Al	Top	40–2500	5°A		.008	.006	.006	AC	44	14mm	.025	.020	10°B	3B	98
40 (1940)	Wau 6MKR	6-4 1/4x4 3/4	Al	Top	35–1500	8°A	3A	.004	.010	.012	AC	84	18mm	.025	.020	3°B	1B	
50, 50H (1940)	Wau 6MZR	6-4 1/4x4 3/4	Al	Top	35–1500	8°A	3A	.004	.010	.012	AC	84	18mm	.025	.020	3°B	1B	
63, 66 (1940-42)	Wau 6SRK	6-4 5/8x5 1/4	Al	Top	35–1500	10°A	3A	.004	.010	.012	AC	73	7/8	.025	.020	10°B	3B	
62, 65 (1940-42)	Con 22R	6-4 1/2x5 1/4	Al	Top	30–1000			.014	.012	.012	AC	83	7/8	.025	.020	15°B		
16, 76 (1941-42)	Her JXF	6-3 11/16x4 1/2	Al	Top	40–2500	5°A		.008	.006	.006	AC	44	14mm	.025	.020	10°B	3B	
17, 77 (1941-42)	Her JXG	6-3 5/8x4 1/2	Al	Top	40–2500	5°A		.008	.006	.008	AC	44	14mm	.025	.020	10°B	3B	
35, 90 (1941-42)	Her WXC3	6-4 1/4x4 1/2	Al	Top	40–2500	2°A		.010	.008	.010	AC	44	14mm	.025	.020	TC	TC	
45, 55, 92, 94 (1941-42)	Her WXLC3	6-4 1/4x4 3/4	Al	Top	40–2500	2°A		.010	.008	.010	AC	44	14mm	.025	.020	TC	TC	
FORD																		
51, V8 (1935-36)	Own	8-3 1/16x3 3/4	CA	Top	30–2000	9 1/2°B	3B		Y	Y	Y	Ch	7	18mm	.025	YY	4°B	1 1/16B	90
75, V8 (1937)	Own	8-2.6x3.2	St	Top	30–3200	9 1/2°B			Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		110
79, V8 (1937)	Own	8-3 1/16x3 3/4	St	Top	30–2000	9 1/2°B			Y	Y	Y	Ch	H10	18mm	.025	YY	4°B		100
81T, 817T, 81Y, 81C (1938)	Own	8-3 1/16x3 3/4	CA	Top	30–2000	TC	TC		Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		100
82Y, 82C (1938)	Own	8-2.6x3.2	CA	Top	30–2000	9 1/2°B			Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		105
91T, 917T, 911W, 91W, 917W, 91Y, 91C (1939)	Own	8-3 1/16x3 3/4	CA	Top	30–2000	TC	TC		Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		100
99T, 997T, 991W, 99W, 997W (1939)	Own	8-3 1/16x3 3/4	CA	Top	30–2000	TC	TC		Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		100
92Y, 922C, 02D, 02Y, 022C (1939-40)	Own	8-2.6x3.2	St	Top	30–2000	9 1/2°B			Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		105
018T, 01T, 01W, 011W, 01D, 01Y, 01C (1940)	Own	8-3 1/16x4 3/8	St	Top	30–2000	TC	TC		Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		100
098T, 09T, 09W, 091W (1940)	Own	8-3 5/16x3 3/4	St	Top	30–2000	TC	TC		Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		100
118T, 11T, 11W, 111W, 11D, 11Y, 11C, 11U (1941-42)	Own	8-3 1/16x3 3/4	St	Top	30–2000	TC	TC					Ch	H9	14mm	.032	YY	4°B		100
119T, 19T, 19W, 191W, 19U, 198T (1941-42)	Own	8-3 1/16x3 3/4	St	Top	30–2000	TC	TC					Ch	H9	14mm	.032	YY	4°B		100
IND, INY, INC (1941-42)	Own	4-3 1/16x3 3/4	St	Top	30–2000	TC	TC					Ch	H9	14mm	.032	YY	4°B		105
FWD																		
H3, T26	Wau 6BK	6-3 3/4x4 1/4	Al	Top	40–45	TC	TC	.010	.011	.015	Ch	6 COM	18mm	.025	.015	8°B		112
HG, HM, HH6	Wau 6MK	6-4 1/4x4 3/4	Al	Top	40–45	8°A	3A	.004	.010	.016	Ch	6 COM	18mm	.025	.015	3°B		80
SUA, SU	Wau 6SRL	6-4 5/8x5 1/4	Al	Top	40–45	10°A	3A	.004	.010	.018	Ch	O	7/8	.025	.015	3°B		
YU, MJ5, MJ6x6	Wau 6SRK	6-4 5/8x5 1/8	Al	Top	40–45	10°A	3A	.004	.010	.018	Ch	O	7/8	.025	.015	3°B		90
MJ6	Wau 6-125	6-4 5/8x5 1/8	Al	Top	40–45	42°B	15B	.008	.012	.020	Ch	J8	14mm	.025	.015	3°B		96
M10	Her HXE	6-5 1/4x5	Al	Top	40–45	5°B		.010	.010	.016	Ch	O	7/8	.025	.015	3°B		
M7, M6x6	Wau 6RB	6-4 5/8x5 1/4	Al	Top	40–45	10°A	4A	.008	.008	.012	Ch	O	7/8	.025	.015	3°B		90
HG, HM, HH6, T32 (1939)	Wau MKR	6-4 1/4x4 3/4	Al	Top	35–1000	8°A	3A	.004	.009	.013	Ch	6 COM	18mm	.025	.015			
CUA, CU (1939)	Wau MZR	6-4 1/4x4 3/4	Al	Top	35–1000	8°A	3A	.004	.009	.013	Ch			.025	.015			
SUA, SU (1939)	Wau RLR	6-4 5/8x5 1/4	Al	Top	35–1000	8°A	3A	.004	.009	.017	Ch			.025	.015			
YU, MJ5, MJ6, MJ6x6, T40 (1939)	Wau SRKR	6-4 5/8x5 1/8	Al	Top	35–1000	8°A	3A	.004	.009	.017	Ch			.025	.015			
M7, M6x6, T60, T65 (1939)	Wau RBR	6-5x5 3/4	Al	Top	35–1000	10°A	4A	.008	.007	.009	Ch			.025	.015			
HS, T-26	Wau 6BK	6-3 3/4x4 1/4	Al	Top	40–2800	5A		.010	.010	.014	Ch	7 COM	18mm	.025	.015	*23°B		
HA, T-30	Wau 6BZ	6-4x4 1/4	Al	Top	40–2500	5A		.010	.010	.014	Ch	7 COM	18mm	.025	.015	*23°B		
HR, T-32	Wau 6MKR	6-4 1/4x4 3/4	Al	Top	40–2500	8A		.004	.008	.014	Ch	7 COM	18mm	.025	.015	*24°B		
CUA, CU	Wau 6MZR	6-4 1/4x4 3/4	Al	Top	40–2500	8A		.004	.008	.014	Ch	7 COM	18mm	.025	.015	*24°B		
SUA, SU	Wau 6SRLR	6-4 5/8x5 1/4	Al	Top	40–2250	8A		.004	.008	.016	Ch	1 COM	7/8	.025	.015	*22°B		
YU, MJ6	Wau 6SRKR	6-4 5/8x5 1/8	Al	Top	40–2250	8A		.004	.008	.016	Ch	1 COM	7/8	.025	.015	*18°B		
M6	Wau 6-140GK	6-4 1/2x5 1/2	Al	Top	40–2250	5A		.006	.014	.016	Ch	COM	7/8	.025	.015	*		
M7	Wau 6-145GK	6-5 1/4x6	Al	Top	40–2000	5A		.006	.012	.024	Ch	COM	7/8	.025	.015	*		
M10	Her HXE	6-5 1/4x6	Al	Top	40–2000	5B		.010	.010	.016	Ch	O	7/8	.025	.015	*3°B		
GENERAL MOTORS																		
T84, T78, T78T (1935)	Own 450	6-4 5/8x5	Al	Top	42–	8°B		.012	.012	.012	AC	G9	18mm	.035	Z	17°B		
T83, T75, T75H (1935)	Own 400	6-4 1/8x5	Al	Top	42–	8°B		.012	.012	.012	AC	G9	18mm	.035	Z	17°B		
T51, T51W, T74, T74H (1935)	Own 331	6-3 3/4x5	Al	Top	35–	9°A		.012	.012	.012	AC	G9	18mm	.035	Z	17°B		
T43, T73, T73H (1935)	Own 257	6-3 7/16x4 5/8	Al	Top	30–	4°B		.012	.012	.012	AC	G9	18mm	.035	Z	15°B		
T16 (1935)	Olds 6	6-3 7/16x4 1/2	Al	Top	30–	5°B		.010	.010	.010	AC	G9	18mm	.035	Z			
T18H (1936)	Own 239	6-3 7/16x4 5/8	Al	Top	30–	4°B		.012	.012	.012	AC	K7	14mm	.025	Z	15°B		
T18, T23 (1935)	Own 221	6-3 7/16x4 5/8	Al	Bot	30–	4°B		.012	.012	.012	AC	G9	18mm	.035	Z	15°B		
T23H, T33 (1935)	Own 257	6-3 7/16x4 5/8	Al	Top	30–	4°B		.012	.012	.012	AC	K7		.035	Z	15°B		
T33, T33H (1936)	Own 286	6-3 5/8x4 5/8	Al	Top	30–	4°B		.012	.012	.012	AC	K7	14mm	.025	Z	15°B		
T46H, T46 (1935)	Own 331	6-3 3/4x5	Al	Top	35–	9°A		.012	.012	.012	AC	G9	18mm	.035	Z	17°B		

ENGINE SERVICE SPECIFICATIONS — Continued

(Key to Abbreviations on pages 36 and 37)

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After		Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted)		SPARK PLUG				Breaker Point Gap	Spark Occurs °TC B-Before A-After	Spark Occurs Fly-Wheel Teeth °TC B-Before A-After	Comp. Pressure at Cranking Speed
						°TC	Flywheel Teeth TC		Intake	Exhaust	Make	Type	Size	Gap				
GENERAL MOTORS—Continued																		
T81 (1935)	Own 400	6-4½x5	Al	Top	42-	8°B	.....	.012	.012	.012	AC	G9	18mm	.035	Z	17°B	.....	.....
T81H, T81 (1936)	Own 400	6-4½x5	Al	Top	42-2300	8°B	.....	.012	.012	.012	AC	G9	18mm	.035	Z	.....	.....	.....
T14, T16, T16H (1936)	Olds 6	6-3 1/16x4 1/16	Al	Top	30-	5°B	.....	.008	.008	.010	AC	G9	18mm	.....	Z	.....	.....	106
T18 (1936)	Own 239	6-3 1/16x4 9/16	Al	Top	30-	4°B	.....	.012	.012	.012	AC	K7	14mm	.025	Z	15°B	.....	.....
T46, T74 (1936)	Own 331	6-3¾x5	Al	Top		18°A	.....	.012	.012	.012	AC	G9	18mm	.035	Z	.....	.....	.....
T23, T73, T73H (1936)	Own 257	6-3 1/16x4 5/16	Al	Top	30-	4°B	.....	.012	.012	.012	AC	G9	18mm	.035	Z	.....	.....	.....
T74H (1936)	Own 331	6-3¾x5	Al	Top	35-	4°B	.....	.012	.012	.012	AC	G9	18mm	.035	Z	.....	.....	.....
T75 (1936)	Own 400	6-4½x5	Al	Top	42-	8°B	.....	.012	.012	.012	AC	G9	18mm	.035	Z	.....	.....	.....
T76 (1936)	Own 450	6-4½x5	Al	Top	42-	8°B	.....	.012	.012	.012	AC	G9	18mm	.035	Z	.....	.....	.....
T14, T16, F16, T16H, F16H (1937)	Olds 6	6-3 1/16x4 1/16	Aa	Top	30-	5°B	.....	.008	.008	.011	AC	K9	18mm	.033	D	2°B	.....	110
T18, F18, T18H, F18H (1937)	Own 239	6-3 1/16x4 5/16	Al	Top	35-	4°B	.....	V	V	V	AC	K7	14mm	.035	Z	15°B	.....	.....
T23, F23, T23H, F23H (1937)	Own 257	6-3 1/16x4 5/16	Al	Top	30-	4°B	.....	V	V	V	AC	K7	14mm	.035	Z	15.B	.....	.....
T33, F33, T33H, F33H (1937)	Own 286	6-3 5/16x4 5/16	Al	Top	30-	4°B	.....	V	V	V	AC	K7	14mm	.035	Z	15°B	.....	.....
T46, F46 (1937)	Own 331	6-3¾x5	Al	Bot	42-2400	8½°A	.....	V	V	V	AC	K7	14mm	.035	Z	15°B	.....	.....
T48, 400, F48 (1937)	Own 400	6-4½x5	Al	Top	42-	8½°A	.....	V	V	V	AC	K7	14mm	.035	Z	15°B	.....	.....
T61, F61 (1937)	Own 400	6-4½x5	Al	Top	42-	8½°A	.....	.008	V	V	AC	K7	14mm	.035	Z	15°B	.....	.....
T61, F61 (1937)	Opt 450	6-4¾x5	Al	Top	42-	8°B	.....	.008	V	V	AC	K7	14mm	.035	Z	15°B	.....	.....
T61H, F61H (1937)	Own 400	6-4½x5	Al	Top	42-	8°A	.....	.008	V	V	AC	K7	14mm	.035	Z	15°B	.....	.....
T61H, F61H (1937)	Opt 450	6-4¾x5	Al	Top	42-	8°B	.....	.008	V	V	AC	K7	14mm	.035	Z	15°B	.....	.....
T14, T145, T15, T155 (1938)	Own 223	6-3 7/16	CI	Top	35-45	5°B	.....	.0125	.012	.012	AC	45	14mm	.030	D	5°B	.....	.....
T16, T16H, F16, F16H (1938)	Own 239	6-3 1/16x4 1/16	Aa	Top	28-35	5°B	.....	.008	.011	.011	AC	45	14mm	.030	D	TC	TC	.....
T18, F18, T18H, F18H (1938)	Own 239	6-3 1/16x4 5/16	Al	Top	35-	4°B	.....	.012	V	V	AC	K7	14mm	.035	D	15°B	.....	.....
T23, T23H, F23, F23H (1938)	Own 257	6-3 1/16x4 5/16	Al	Top	35-	4°B	.....	.012	V	V	AC	K7	14mm	.035	D	15°B	.....	.....
T33, T33H, F33, F33H (1938)	Own 286	6-3 5/16x4 5/16	Al	Top	35-	4°B	.....	.012	V	V	AC	K7	14mm	.035	D	15°B	.....	.....
T46, F46 (1938)	Own 331	6-3¾x5	Al	Top	42-2400	18°A	.....	.012	V	V	AC	K7	14mm	.035	Z	15°B	.....	.....
T61, T61H, F61, F61H (1938)	Own 400	6-4½x5	Al	Top	42-45	18°A	.....	.012	V	V	AC	K7	14mm	.035	Z	15°B	.....	.....
AC106, AC150, AC200, AC250 (1939-41)	Own 228	6-3 1/16x3 11/16	Al	Top	40-1600	28°B	10|B		.006	.013	AC	44	14mm	.035	D		.....	.....
AC300, AF300, AC356, AF350 (1939-41)	Own 228	6-3 1/16x3 11/16	Al	Top	40-1600	28°B	10|B		.006	.013	AC	44	14mm	.025	D	TC	TC	.....
AC400, AF400, AC450, AF400 (1939-41)	Own 248	6-3 5/16x3 11/16	Al	Top	40-1000	28°B	10½B		.006	.013	AC	44	14mm	.025	D		.....	.....
AF240, CC100 to CC350, CF300 to CC350, up to Engine No. 228-87569	Own 228	6-3 1/16x3 11/16	Al	Top	40-1000	4°B	.....	.....	.006	.013	AC	44	14mm	.025	D	.....	.....	.....
Engine No. 228-87569 and up	Own 228	6-3 1/16x3 11/16	Al	Top	40-1000	4°B	.....	.....	.012	.012	AC	44	14mm	.025	D	.....	.....	.....
CC350, CF350, Engine No. 236-001 and up	Own 236	6-3 1/16x3 13/16	Al	Top	40-1000	4°B	.....	.....	.012	.012	AC	44	14mm	.025	D	.....	.....	.....
CC400 to CC450, CF400 to CF450, up to Engine No. 248-17848	Own 248	6-3 1/16x3 13/16	Al	Top	40-1000	4°B	.....	.....	.006	.013	AC	44	14mm	.025	D	.....	.....	.....
Engine No. 248-17848 and up	Own 248	6-3 1/16x3 13/16	Al	Top	40-1000	4°B	.....	.....	.012	.012	AC	44	14mm	.025	D	.....	.....	.....
CCKW350, up to Engine No. 256-02769	Own 256	6-3 1/16x3 11/16	Al	Top	40-1000	4°B	.....	.....	.006	.013	AC	44	14mm	.025	D	.....	.....	.....
Engine No. 256-02769 and up	Own 256	6-3 1/16x3 11/16	Al	Top	40-1000	4°B	.....	.....	.012	.012	AC	44	14mm	.025	D	.....	.....	.....
CC450 Spec., CF450 Spec., up to Engine No. 27-11344	Own 270	6-3 1/16x3 11/16	Al	Top	40-1000	4°B	.....	.....	.006	.013	AC	44	14mm	.025	D	.....	.....	.....
Engine No. 270-11344 and up	Own 270	6-3 1/16x3 11/16	Al	Top	40-1000	4°B	.....	.....	.012	.012	AC	44	14mm	.025	D	.....	.....	.....
AC600, AF500, AC550, AF550 (1939-40)	Own 278	6-3 5/16x4½	Al	Top	40-1000	4°B	.....	.....	.012	.012	AC	44	14mm	.025	D	.....	.....	.....
AC600, AF600, AC650, AF650 (1939-40); AC520, AF520 (1942)	Own 308	6-3 11/16x4½	Al	Top	40-1000	4°B	.....	.....	.012	.012	AC	44	14mm	.025	D	.....	.....	.....
AC700, AF700 (1939-40); AC620, AC700, AC770, AF620, AF700, AY700 (1942)	Own 361	6-4 1/16x4½	Al	Top	40-1000	8°B	.....	.....	.012	.012	AC	44	14mm	.025	D	.....	.....	.....
AC800, AF800 (1939-40); AC720, AC800, ACX870, AF720, AF800, AY800 (1942)	Own 426	6-4½x5	Al	Top	40-1000	8°B	.....	.....	.012	.012	AC	44	14mm	.025	D	.....	.....	.....
AC850, AF850 (1939-42)	Own 451	8-4⅛x5	Al	Top	40-1000	8°B	.....	.....	.012	.012	AC	44	14mm	.025	D	.....	.....	.....
AC750, AC850, AF750, AF850, ACX890, AY850	Own 477	6-4½x5	Al	Top	40-1000	8°B	.....	.....	.012	.012	AC	44	14mm	.025	D	.....	.....	.....
GRAMM																		
15 (1937-39), 11, 21 (1940)	Her QXB	6-3¼x4 1/16	CI	Top	26-2600	5°A	.....	.006	.008	.010	Ch	3 COM	⅞	.025	.020	.....	.....	103
25, 30 (1937-39)	Her JXA	6-3 5/16x4¼	CI	Top	26-2600	5°A	.....	.008	.008	.010	Ch	3 COM	⅞	.025	.020	.....	.....	110
40, 45, 50 (1937-39), 46, 56 (1940-42)	Her JXB	6-3 5/16x4¼	CI	Top	26-2600	5°A	.....	.008	.008	.010	Ch	3 COM	⅞	.025	.020	.....	.....	102
65, 70 (1937-39), 71 (1940-42)	Her JXC	6-3¾x4¼	Al	Top	26-2600	5°A	.....	.008	.008	.010	Ch	3 COM	⅞	.025	.020	.....	.....	101
75, 85 (1937-39), 76, 86 (1940-42)	Her JXD	6-4x4¼	Al	Top	26-2600	5°A	.....	.008	.008	.010	Ch	3 COM	⅞	.025	.020	.....	.....	101
DJX55, DJX40, DJX70 (1937-39), D46, D56 (1940-42)	Her DJXB	6-3½x4½	Al	Top	40-2000	12°B	.....	.016	.016	.016	No	Die sel				.....	.....	150
DJX75, DJX85 (1937-39), D71 (1940-42)	Her DJXC	6-3¾x4½	Al	Top	40-2000	12°B	.....	.016	.016	.016	Die	sel				.....	.....	150
31, 41 (1940-42)	Her QXC	6-3 5/16x4½	CI	Top	26-2600	5°A	.....	.008	.008	.010	Ch	3 COM	⅞	.025	.020	.....	.....	103
98 (1940-42)	Her WXLC3	6-4¼x4¾	Al	Top	26-2600	2°A	.....	.010	.006	.010	Ch	3 COM	⅞	.025	.020	.....	.....	106
D76 (1940-42)	Bud 6DT317	6-3 5/16x5½	Al	Top	35-1500	20°B	.....	.016	.016	.016	Die	sel	.....	.....	.....	.....	.....	150
D96, D96 (1940-42)	Bud 6DT389	6-3 7/16x5½	Al	Top	35-1500	12°B	.....	.016	.016	.016	Die	sel	.....	.....	.....	.....	.....	150
HUG																		
18	Wau 6BL	6-3½x4¼	CI	Top	30-1000	TC	TC	.010	.006-.008	.010-.012	Ch	COM 7	18mm	.025	H	25°B	8B	112
19 (1939), 19W, 83W (1940); 8B6P-83W (1942)	Wau 6BK	6-3¾x4¼	CI	Top	40-1500	TC	TC	.010	.010-12	.014-16	Ch	COM 7	18mm	.025	H	25°B	8B	112
23	Bud H298	6-3¾x4½	CI	Top	30-1000	TC	TC	.006	.006H	.008H	Ch	COM 7	18mm	.025	H	27°B	9½B	83
42, 70	Bud K369	6-4 1/16x4¾	SS	Top	30-1000	TC	TC	.006	.006H	.008H	Ch	COM 7	18mm	.025	H	30°B	10½B	82
43A, 43T, 67K, 67Q, 43-4, 67K4	Bud K428	6-4⅜x4¾	SS	Top	30-1000	TC	TC	.006	.006H	.008H	Ch	COM 7	18mm	.025	H	27°B	9½B	84
43L, 97L, 97LD, 67Q4	Bud L525	6-4½x5½	SS	Top	30-1000	TC	TC	.006	.006H	.008H	Ch	COM 7	18mm	.025	H	22°B	7¼B	82
98	Bud GF6	6-4¾x6	CI	Bot	30-1000	5°A	2¼A	.010	.010C	.016C	Ch	COM 7	18mm	.025	H	20°B	6¼B	72
18W (1940-41)	Wau 6BM	6-3 5/16x4¼	CI	Top	40-1500	TC	TC	.010	.010-12	.014-16	Ch	COM 7	18mm	.025	.025	25°B	8°B	112
22W, 85W (1940-42)	Wau 6BZ	6-4x4¼	CI	Top	40-1500	TC	TC	.010	.010-12	.014-16	Ch	COM 7	18mm	.025	.025	25°B	8°B	112
42W, 87W (1940-42)	Wau 6MZR	6-4 1/16x4¾	CI	Top	40-1500	8°A	3A	.004	.010-12	.014-16	Ch	COM 7	18mm	.025	.025	25°B	8°B	90
43W, 46-4 (1940-42)	Wau 6GAL	6-5x5½	CI	Top	40-1500	TC	TC	.008	.010-12	.014-16	Ch	COM 7	18mm	.025	.025	25°B	8°B	112
44-4 (1940-42)	Wau 6SRLR	6-4⅜x5½	CI	Top	40-1500	10°A	3A	.004	.008-10	.016-18	Ch	COM 2	⅞	.025	.025	22°B	7B	90
46-4 920 (1940-42)	Wau 6SRKR	6-4⅜x5½	CI	Top	40-1500	10°A	3A	.004	.008-10	.016-18	Ch	COM 2	⅞	.025	.025	22°B	7B	80
96, 99, 99S, 98CD, 98MB (1940-42)	Wau 6RBR	6-5x5¼	Al	Top	40-1500	10°A	4A	.008	.008-8	.010-12	Ch	COM 1	⅞	.025	.025	17°B	6B	78
22W, 85W (1941); CB7P (1942)	Wau 6BZ	6-4x4¼	CI	Top	40-1500	TC	TC	.010	.010-12	.014-16	Ch	COM 7	18mm	.025	.025	.....	.....	90
INDIANA																		
84, 85, 86, 87	Her JXB	6-3 5/16x4¼	Al	Top	26-2600	5°A	1½A	.010	.008	.010	.....	COM 1	⅞	.022	E	TC	TC	87
95, 95DR, 95SW75, 95SBT151	Her JXC	6-3¾x4¼	Al	Top	26-2600	5°A	1½A	.010	.008	.010	.....	COM 1	⅞	.022	E	TC	TC	414
17, 17DR, 17SW251, 17SBT251, 19DR	Her YXC	6-4⅜x4¾	Al	Top	26-2600	2°A	¾A	.012	.010	.012	.....	COM 1	⅞	.022	E	TC	TC	91
17A, 17ADR, 17ASW251	Her WXC	6-4x4½	Al	Top	26-2600	2°A	¾A	.012	.010	.012	.....	COM 1	⅞	.022	E	TC	TC	92
94	Her OOB	4-3¾x4½	Al	Top	26-2400	5°A	1½A	.010	.008	.010	.....	COM 1	⅞	.022	E	TC	TC	.....
INTERNATIONAL																		
CI, C15, C30, CS30, C30S	Own HD3	6-3 1/16x4½	CI	Top	25-600	TC	TC	.010	.010	.010	AC	G9	18mm	K	D	6°B	1¼B	95
A1, A2, B2, M2, M3, C10, C20, CS20	Wau XAH	4-3 5/16x4½	CI	Bot	20-2200	10°A	3A	.004	.005	.007	AC	A8	⅞	K	D	5°B	1¼B	72
B3	Own FAB2	6-3 1/16x4	CI	Bot	40-1400	10°A	3A	.024	.015	.015	AC	A8	⅞	K	D	5°B	1¼B	93
C5	Wau FK	4-3¼x4	CI	Top	20-600	.....	.....	.....	.....	.....	Ch	C7	18mm	.....	.....	.....	.....	.....
C36, C35B, CS35, CS35B, C35T, CS35T, B4, C40, CS40, C40T, C40F	Own FAB3	6-3 1/16x4	CI	Bot	40-1400	10°A	3A	.024	.015	.015	AC	A8	⅞	K	D	5°B	1½B	93
A4, A5, A6, C50, C50T	Own FBB	6-3 5/16x4½	Al	Bot	40-1800	10°A	3½A	.016	.015	.015	AC	A8	⅞	K	D	10°B	3½B	76
C55, C55F, C55T, C60, C60T	Own FBB3	6-3 5/16x4½	Al	Top	40-1800	10°A	3½A	.016	.015	.015	AC	A8	⅞	K	D	10°B	3½B	92
A7, A7F	Own FDB	6-4½x5½	CI	Bot	40-1800	10°A	4½A	.011	.011	.013	AC	A8	⅞	K	D	5°B	2¼B	70
A8	Own FEB	6-5x5½	CI	Bot	40-1700	10°A	4½A	.011	.011	.013	AC	A8	⅞	K	D	5°B	2¼B	.....
D2, D15	Own HD213	6-3 1/16x4½	CI	Top	25-600	TC	TC	.010	.010-12	.012-14	AC	D7	18mm	K	D	6°B	1¾B	93
D30, D530, D30B, DS30B, D300, DS300, D186T, DS186T	Own HD232	6-3 1/16x4½	CI	Top	25-600	TC	TC	.010	.010-12	.012-14	AC	D7	18mm	K	D	6°B	1¾B	93

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ENGINE SERVICE SPECIFICATIONS — Continued

(Key to Abbreviations on pages 36 and 37)

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After °TC	Intake Valve Opens B-Before A-After Flywheel Teeth TC	Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted) Intake	OPERATING TAPPET CLEARANCE (Hot unless noted) Exhaust	SPARK PLUG Make	SPARK PLUG Type	SPARK PLUG Size	SPARK PLUG Gap	Breaker Point Gap	Spark Occurs °TC A-After B-Before	Spark Occurs Fly-Wheel Teeth °TC A-After B-Before	Comp. Pressure at Cranking Speed
INTERNATIONAL—Continued																		
D35, DS35, D35B, D216T	Own FAB241	6-3⅜x4½	Al	Top	40-800	10°A		.024	.015	.015	AC	A6	⅞	K	D	3°B	1B	94
D40	Own FAB259	6-3½x4½	Al	Top	40-1200	10°A		.024	.015	.015	AC	A8	⅞	K	D	3°B	1B	98
D50, D246T, D246F, D500	Own FBB298	6-3¾x4½	Al	Top	40-1600	10°A		.016	.015	.015	AC	A9	⅞	K	D	10°B	3½B	92
D60, DR60	Own FBB361	6-4⅛x4½	Al	Top	40-1400	5°A		.016	.015	.015	AC	A9	⅞	K	D	10°B	3½B	88
DR70, DR346T, D346F, D700	Own FBB401	6-4⅛x5	Al	Top	40-1400	5°A		.016	.015	.015	AC	A9	⅞	K	D	6°B	3½B	92
DR426F	Own FBB450	6-4½x5	Al	Top	40-1400			.016	.015	.015	AC	A9	⅞	K	D	10°B	3½B	88
AR626F	Own FEB648	6-5x5½	Al	Top	40-1100	7½°A		.011	.011	.013	AC	A8	⅞	K	D	5°B	2°B	88
K1, K2, K3, K4, KS-4, K5, KS-5 (1941-42)	Own GRD175	6-3x4⅛	CI	Top	25-600	10°B		.020	.015	.017	AC	87S	18mm	R	D	4°B		104
														R	D			
K1, K2, K3, K4, KS-4 (1941-42)	Own GRD214	6-3⅛x4⅛	CI	Top	25-600	10°B		.020	.015	.017	AC	87S	18mm	R	D	4°B		107
														R	D			
K5, KS-5, K5COE (1941-42)	Own GRD233	6-3⅛x4½	CI	Top	25-600	10°B		.020	.015	.017	AC	87S	18mm	R	D	4°B		108
									.015	.015				R	D			
K6, K6-T, K6-F (1941-42); KS6, KS6T (1942)	Own BLD250	6-3⅞x4½	Al	Top	40-	5°B		.023	.018	.018*	AC	43	14mm	R	D	3°B		
									.015	.015				R	D			
K7, K7-COE (1941-42); KS7, KS7-COE (1942)	Own BLD269	6-3⅞x4½	Al	Top	40-	5°B		.023	.018	.018*	AC	43	14mm	R	D	3°B		
K8, K8-T, K8-F (1941-42); KR8, KS8, K8-COE, KR8-COE, KS8-COE, KF8T, KS8T (1942)	Own FBC318	6-3⅞x4½	Al	Top	40-1800	5°A		.016	.015	.015				R	D			
									.018	.018*	AC	75	⅞	R	D	10°B		96
K-10 (1941-42); KS10, KR10 (1942)	Own FBC361	6-4⅛x4½	Al	Top	40-1800	5°A		.016	.015	.015				R	D			
									.018	.018*	AC	75	⅞	R	D	10°B		90
KR11, KR11-1, K-11-F, KR11-COE (1941-42); KS11, KS11-COE, KS11T (1942)	Own FBC401	6-4½x5	Al	Top	40-1800	5°A		.016	.015	.015				R	D			
									.018	.018*	AC	75	⅞	R	D	6°B		99
K12-F	Own FBC450	6-4⅝x5	Al	Top	40-1800	5°A		.016	.015	.015				R	D			
									.018	.018*	AC	75	⅞	R	D	10°B		89
KENWORTH																		
88, 89, 89SBT, 89SW, 90	Her JXC	6-3¾x4¼		Top	26-2600	5°A		.006	.006	.006	Ch	1 COM	⅞	.025	.020	TC		
127	Her WXC	6-4x4½		Top	26-2600	2°A		.010	.006	.010	Ch	1 COM	⅞	.025	.020	TC		
128	Her WXC2	6-4⅛x4½		Top	26-2600	2°A		.010	.006	.010	Ch	1 COM	⅞	.025	.020	TC		
146B	Bud K393	6-4⅜x4¾																
186	Her YXC2	6-4⅛x4¾		Top	26-2600	2°A		.010	.006	.010	Ch	1 COM	⅞	.025	.020	TC		
241	Her RXB	6-4½x5¼	Al	Top	26-2600	2°A		.010	.006	.010	Ch	1 COM	⅞	.025	.020	TC		
513 (1938)	Her JXD	6-4x4¼	Al	Top	26-2600	5°A		.008	.008	.010			⅞	.025	.020	TC	TC	
525, 526, 527, 528, 541, 542 (1938-40-41-42)	Bud L0525	6-4½x5½	Al	Top	25-1000	10°B		.009	.008	.012			14mm	.025	.020	10°B		
529, 530, 531, 532, 539, 540 (1938)	Bud K428	6-4⅝x4¾	Al	Top	25-1000	TC	TC	.006	.006	.008			18mm	.025	.015	10°B		
533, 534, 535 (1938)	Bud K393	6-4⅜x4¾	SS	Top	25-1000	TC	TC	.006	.006	.008			18mm	.025	.015	10°B		
536, 537, 538 (1938)	Her JXM	6-3¾x4¼	Al	Top	26-2600	5°A		.006	.006	.006			⅞	.025	.020	TC		
553, 554, 555, 558 (1940-42-42)	Her WXLC3	6-4½x4¾	Al	Top	26-2600	2°A		.010	.006	.010			⅞	.025	.020	16°B		
536, 537, 538, 543, 544, 545, 56C, 561, 562, 563 (1940-42)	Her JXDM	6-4x4¼	Al	Top	26-2600	5°A		.008	.008	.010			⅞	.025	.020	TC	TC	
505, 506, 507, 508, 509, 513, 514, 515, 516 (1941-42)	Cum HB4	4-4⅞x6	CI	Top	55-	15°A			.012	.015		Die	sel					
510, 511, 512, 519, 520, 521, 522, 523, 524, 552, 548, 549, 550 (1941-42)	Cum HB6	6-4⅞x6	CI	Top	55-	15°A			.025	.025		Die	sel					
549, 550 (1941-42)	Cum HB6	6-4⅞x6	CI	Top	55-	15°A			.025	.025		Die	sel					
548, 549, 550 (1941-42)	Cum HBS6	6-4⅞x6	CI	Top	55-	15°A			.025	.025		Die	sel					
543, 544, 545, 546, 559 (1941-42)	Cum AA600	6-4x5	CI	Top	55-							Die	sel					
529, 530, 531, 532 (1941-42), 556 (1942)	Wau 6MZR	6-4¼x4	Al	Top	40-1500				.008	.014			14mm	.020				
564, 565, 566, 567 (1941-42)	Cat D468	6-4¼x5½	Al	Top	15-45				.010	.010								
LA FRANCE REPUBLIC																		
C3, D4, E4	Wau 6BK	6-3¾x4¼	Al	Top	40-	TC	TC	.010	.006-.008	.010-.012	AC	86	18mm	.025				112
F4, H6	Wau 6MK	6-4⅛x4⅜	Al	Top	40-	8°A	3A	.004	.004-.006	.012-.014	AC	86	18mm	.025				88
K1	Wau 6SRL	6-4⅜x5¼	Al	Top	40-	10°A	3A	.004	.006-.008	.016-.018	AC	76	⅞	.025				88
M4	Wau 6-125	6-4⅜x5½	CI	Top	40-	42°B	15B	.010	.010-.012	.018-.020	AC	85	18mm	.025				98
EH5B, EH5D, EH6B, EH6D	Wau 6BZ	6-4x4¼	Al	Top	40-1500	5°A	2A	.010	.010-.012	.014-.016	AC	86	18mm	.025				112
FH5B, FH5D, HH7	Wau 6MZR	6-4¼x4⅜	Al	Top	40-1500	8°A	3A	.004	.008-.010	.014-.016	AC	86	18mm	.025				90
KH2	Wau 6SRLR	6-4⅜x5¼	Al	Top	40-1500	8°A	3A	.004	.008-.010	.016-.018	AC	76	⅞	.025				96
MH5	Wau 6SRKR	6-4⅜x5⅛	Al	Top	40-1500	8°A	3A	.004	.008-.010	.016-.018	AC	76	⅞	.025				96
MARMON-HERRINGTON																		
A10-4	Her JXA	6-3⅜x4¼		Top	26-2600	2°A	½A	.006	.006	.006	Ch	1 COM	⅞	.025	.020	TC	TC	96
A30-4	Her WXC	6-4x4½		Top	26-2600	2°A	¾A	.010	.006	.010	Ch	1 COM	18mm	.025	.020	TC	TC	92
A40-4, A50-4	Her WXC3	6-4¼x4½		Top	26-2600	2°A	¾A	.010	.006	.010	Ch	1 COM	18mm	.025	.020	TC	TC	92
TH300-4	Her YXC	6-4⅜x4¾		Top	26-2600	2°A	¾A	.010	.006	.010	Ch	1 COM	18mm	.025	.020	TC	TC	91
TH310-4	Her YXC3	6-4⅜x4¾		Top	26-2600	2°A	¾A	.010	.006	.010	Ch	1 COM	18mm	.025	.020	TC	TC	91
TH310A-4, TH310A-6	Her RXC	6-4⅝x5¼	Al	Top	26-2600	2°A	¾A	.010	.006	.010	Ch	1 COM	18mm	.025	.020	TC	TC	100
TH315-4, TH315-6	Her HXB	6-5x6	Al	Top	35-1600	5°B	2B	.015	.010	.016	Ch	1 COM	18mm	.025	.020	TC	TC	105
TH320-4, TH320-6	Her HXC	6-5¼x6	Al	Top	35-1600	5°B	2B	.015	.010	.016	Ch	1 COM	18mm	.025	.020	TC	TC	106
B10-4, C10-4, DSD100-4	Her JXB	6-3⅝x4¼	Al	Top	25 Max.	2°A	½A	.006	.006	.006	Ch	2 COM	⅞	.025	.020	TC	TC	96
A20-4, B20-4, C20-4, C20-6, DSD200-4, DSD200-6	Her JXC	6-3¾x4¼	Al	Top	25 Max.	2°A	½A	.006	.006	.006	Ch	2 COM	⅞	.025	.020	TC	TC	114
B30-4, C30-4, C30-6, DSD300-4, DSD300-6	Her JXD	6-4x4¼	Al	Top	25 Max.	2°A	½A	.006	.006	.006	Ch	2 COM	⅞	.025	.020	TC	TC	114
B40-4, B40-6, C40-4, C40-6, DSD400-4, B50-4, B6-50 C50-4, C50-6, DSD500-4, DSD500-6	Her WXC3	6-4¼x4½	Al	Top	25 Max.	2°A	¾A	.010	.006	.010	Ch	8 COM	18mm	.025	.020	TC	TC	92
B60-4, C55-4, C55, DR4, C60-4, C60-6, DSD550, DR4, DSD600-4, DSD600-6	Her RXB	6-4½x5¼	Al	Top	25 Max.	2°A	¾A	.010	.006	.010	Ch	8 COM	18mm	.025	.020	TC	TC	103
B70-4, B70-6, C70-4, DSD700-4, DSD700-6	Her RXB	6-4½x5¼	Al	Top	25 Max.	2°A	¾A	.010	.006	.010	Ch	8 COM	18mm	.025	.020	TC	TC	103
B80-4, B80-6, C80-4, C80-6, DSD800-4, DSD800-6	Her RXC	6-4⅝x5¼	Al	Top	25 Max.	2°A	¾A	.010	.006	.010	Ch	8 COM	18mm	.025	.020	TC	TC	103
TH415-4, TH415-6, TH515-4, TH515-6	Her HXB	6-5x6	Al	Top	25 Max.	5°B	2B	.015	.010	.016	Ch	8 COM	18mm	.025	.020	TC	TC	105
TH420-4, TH420-6, DSD900-4, DSD900-6	Her HXD	6-5½x6	Al	Top	25 Max.	5°B	2B	.015	.010	.016	Ch	8 COM	18mm	.025	.020	TC	TC	105
B5-4x4, B6-4x4, B5-6x6, B6-6x6, B5-6x4, B6-6x4	Ford V8	8-3⅛x3⅜	Al	Top	40 Max.	9½°B		Y	Y	Y	Ch	7 COM	18mm	.025	.020	TC	TC	95
TH520-4, TH520-6, DSD1000-4, DSD1000-6	Her HXE	6-5¾x6	Al	Top	25 Max.	5°B	2B	.015	.010	.016	Ch	8 COM	18mm	.025	.020	TC	TC	105
LD1 (1937), CSA-4, CSB-4, C5-4, C6-4 (1937), C5-6, C-6 (1937)	Ford V8	8-3⅛x3⅜	St	Top	40 Max.			Y	Y	Y			18mm	.025	YY	4°B		100
LD2-4, E5-4, E5-6, E6-4, E6-6 (1938)	Ford V8	8-3⅛x3⅜	CA	Top	30-2000	TC	TC	Y	Y	Y	Ch	8 COM	14mm	.025	YY	4°B		100
LD3-4, F5-4, F6-4, F5-6, F6-6, OT2-4 (1939)	Ford 85	8-3⅛x3⅜	CA	Top	30-2000	TC	TC	Y	Y	Y	Ch	8 COM	14mm	.025	YY	4°B		100
FF5-4, FF6-4, FF5-6, FF6-6, OOT2-4 (1939)	Ford 95	8-3⅜x3⅜	CA	Top	30-2000	TC	TC	Y	Y	Y	Ch	8 COM	14mm	.025	YY	4°B		100
H5-4, H6-4, H5-6, H6-6, LD4-4, OT3-4 (1940)	Ford 85	8-3⅛x3⅜	St	Top	30-2000	TC	TC	Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		100
HH5-4, HH6-4, HH5-6, HH6-6, LLD4-4, OOT3-4 (1940)	Ford 95	8-3⅜x3⅜	St	Top	30-2000	TC	TC	Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		100
J5-4, J6-4, J5-6, J6-6, LD5-4, OT4-4 (1941)	Ford 85	8-3⅛x3¾	St	Top	30-2000	TC	TC	Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		100
JJ5-4, JJ6-4, JJ5-6, J56-6, LLD5-4, OOT4-4 (1941)	Ford 95	8-3⅜x3¾	St	Top	30-2000	TC	TC	Y	Y	Y	Ch	H10	14mm	.025	YY	4°B		100
OSHKOSH																		
WLX	Her WXC2	6-4⅛x4½	Al	Top	26-2600	2°A		.006	.008	.010	Ch	1 COM	⅞	.025	.020			95
JCB	Her JXC	6-3¾x4¼	Al	Top	26-2600	5°A		.008	.008	.010	Ch	1 COM	⅞	.025	.020			115
JD	Her JXD	6-4x4¼	Al	Top	26-2600	5°A		.008	.008	.010	Ch	1 COM	⅞	.025	.020			115
FD, FB-35, FB, W700	Her RXC	6-4⅝x5¼	Al	Top	26-2600	2°A		.008	.006	.010	Ch	1 COM	⅞	.025	.020			110
B3S, B3D, WLD, W300, W2300	Her WXC3	6-4¼x4½	Al	Top	26-2600	2°A		.006	.006	.010	Ch	1 COM	⅞	.025	.020			95
C3S, C3D, W400	Her YXC2	6-4⅛x4¾	Al	Top	26-2600	2°A		.006	.008	.010	Ch	1 COM	⅞	.025	.020			95
FC-35, R3S, FS, FC, W500, W600	Her RXB	6-4½x5¼	Al	Top	26-2600	2°A		.006	.006	.010	Ch	1 COM	⅞	.025	.020			110
BG3	Her HXB	6-5x6	Al	Top	35-1600	5°B		.010	.010	.016	Ch	1 COM	⅞	.025	.020			100

ENGINE SERVICE SPECIFICATIONS — Continued

(Key to Abbreviations on pages 36 and 37)

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After °TC	Intake Valve Opens B-Before A-After Flywheel Teeth TC	Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted) Intake	Exhaust	SPARK PLUG Make	Type	Size	Gap	Breaker Point Gap	Spark Occurs °TC A-After B-Before	Spark Occurs Fly-Wheel Teeth °TC A-After B-Before	Comp. Pressure at Cranking Speed
OSHKOSH—Continued																		
GD	Her HXE	6-5⅜x6	Al	Top	35-1600	5°B		.010	.010	.016	Ch	1 COM	⅞	.025	.020			115
W800	Her RXLD	6-4⅜x5¼	Al	Top	26-2600	2°A		.006	.006	.010	Ch	1 COM	⅛	.025	.020			110
W-400	Her YXC3	6-4⅜x4⅜	Al	Top	26-2600	2°A		.006	.006	.010	Ch	1 COM	⅛	.025	.020			95
W-100	Her JXC	6-3¾x4¼	Al	Top	26-2600	5°A		.008	.008	.010	Ch	1 COM	⅛	.025	.020			115
W-200	Her JXD	6-4x4¼	Al	Top	26-2600	5°A		.008	.008	.010	Ch	1 COM	⅛	.025	.020			115
W-900	Cum HB600	6-4⅞x6	CI	Top	55-	15°A			.025	.025								
REO																		
1B4, 1D4	Own	6-3½x5	Al	Bot	40 Max.	TC	TC	.012	.008	.010	Ch	C7	18mm	.025	.020	10°B	4B	80
1B, 1D	Own	6-3½x5	Al	Bot	40 Max.	TC	TC	.012	.008	.010	Ch	C7	18mm	.025	.020	10°B	3B	80
2L, 2B, 2D	Own	6-3⅝x5	Al	Bot	40 Max.	TC	TC	.012	.008	.010	Ch	C7	18mm	.025	.020	10°B	3B	80
ZB4, 2D4, 2L4	Own	6-3⅝x5	Al	Bot	40 Max.	TC	TC	.012	.008	.010	Ch	C7	18mm	.025	.020	10°B	4B	80
2H, 2J, 2K, 3H, 3J, 3K, 3M	Own	6-3⅝x5	Al	Top	40 Max.	TC	TC	.012	.008	.010	Ch	C7	18mm	.025	.020	10°B	4B	80
4H, 4J, 4K, 4M	Own	8-3⅜x5	Al	Bot	40 Max.	TC	TC	.012	.008	.010	Ch	C7	18mm	.025	.020	10°B	4B	80
6AP, 1A4, 1C4 (1936)	Own	6-3⅛x4⅜	Al	Top	30-2000	2°B	½B	.012	.008	.010	Ch	C7	18mm	.025	.020	3°B	1B	85
1A4H, 1C4H, 1B4, 1D4, 2D4M (1936)	Own	6-3⅝x4¼	Al	Bot	40 Max.	5°B	2B	.012	.008	.010	Ch	C7	18mm	.025	.020	10°B	4B	85
1B4H, 1D4H, 2D4MH, 2B4, 2D4, 2H5, 2J5, 3H5, 3J5 3K5, 3HR5, 3JR5, 3KR5 (1936)	Own	6-3⅝x5	Al	Bot	40 Max.	TC	TC	.012	.008	.010	Ch	C7	18mm	.025	.020	10°B	4B	80
4H5, 4J5, 4K5 (1936-1937)	Bud K428	6-4⅜x4¾	SS	Top	40-20	TC	TC	.006	.006	.010	Ch	C7	18mm	.025	.020	10°B		70
450, 475 (1937)	Own S140	4-3⅞x4⅜	Al	Top	35-20	TC	TC	.012	.008	.010	Ch	J7	14mm	.025	.020	5°B	1½B	90
650, 675, 1A4, 1C4 (1937)	Own S209	6-3⅞x4⅜	Al	Top	35-20	2°B	½B	.012	.008	.010	Ch	J6	14mm	.025	.020	2°B	½B	90
1A4H, 1C4H, 1B4, 1D4 (1937)	Own S228	6-3⅜x4¼	Al	Bot	35-20	5°B	2B	.012	.008	.010	Ch	J6	14mm	.025	.020	8½°B	3½B	80
1B4H, 1D4H (1937)	Own S3	6-3⅜x5	Al	Bot	35-20	18°A	7½A	.012	.008	.010	Ch	J6	14mm	.025	.020	8½°B	3½B	80
2B4, 2D4, 2H5, 2J5 (1937)	Own S3	6-3⅜x5	Al	Bot	35-20	TC	TC	.012	.008	.010	Ch	J6	14mm	.025	.020	8½°B	3½B	80
3H5, 3J5, 3K5, 3HR5, 3JR5, 3KR5 (1937)	Own S5	6-3⅜x5	Al	Top	35-20	TC	TC	.012	.008	.010	Ch	J6	14mm	.025	.020	8°B	3B	80
450, 450L, 475, 475L (1938)	Own S140	4-3⅞x4⅜	Al	Top	35-	2°B	½B		.008	.012	Ch	J7	14mm	.025	.020	6°B	1½B	85
650, 650L, 675, 675L, 1A4, 1C4, 1L5 (1938)	Own S209	6-3x4⅜	Al	Top	35-	TC	TC		.008	.012	Ch	J6	14mm	.025	.020	2°B	1½B	85
1A4H, 1C4H, 1B4, 1D4, 1BM7, 2BM7 (1938)	Own S228	6-3⅜x4¼	Al	Top	40-	5°B			.008	.010	Ch	J6	14mm	.025	.020	8°B	3½B	80
1B4H, 1D4H (1938)	Own S3L	6-3⅜x5	Al	Top	40-	TC			.008	.010	Ch	J6	14mm	.025	.020	6°B	3½B	80
2B4, 2D4, 2T5, 2H5, 2L4, 2L7M (1938)	Own S3	6-3⅜x5	Al	Top	40-	8°B	TC		.008	.010	Ch	J6	14mm	.025	.020	8°B	3½B	80
2L4H, 2L7MH, 3H5, 3J5, 3K5, 3HR5, 3JR5, 3KR5 (1938)	Own S5	6-3⅜x5	Al	Top	40-	TC	TC		.008	.010	Ch	J6	14mm	.025	.020	8°B	3B	
4H5, 4J5, 4K5, 3L6H (1938)	Bud K428	6-4⅜x4¾	CI	Bot	30-	TC	TC		.006	.006	Ch	C7	18mm	.025	.020	10°B	1B	70
19 (1940)	Own GC228	6-3⅜x4¼	Al	Bot	40-	5°B	2B	.012	.008	.010	Ch	H10	14mm	.032	.018	8°B	3B	105
20, 21 (1940)	Own GC245	6-3½x4¼	Al	Bot	40-	5°B	2B	.012	.008	.010	Ch	H10	14mm	.032	.018	8°B	3B	105
22 (1940)	Own GC288	6-3½x5	Al	Bot	40-	5°B	2B	.012	.008	.010	Ch	H10	14mm	.032	.018	8°B	3½B	105
23 (1940)	Own GC310	6-3⅝x5	Al	Top	40-	5°B	2B	.012	.008	.010	Ch	H10	14mm	.032	.018	8°B	3½B	105
4D19 (1941)	Bud 4DT226	4-3⅝x5	Al	Top	30-40	TC	TC	.009	.009	.012								390
6D19 (1941)	Bud 6DT294	6-3⅝x4¾	Al	Top	30-40	20°B		.009	.009	.012								600
D20 (1941)	Bud 6DT317	6-3⅝x5⅛	Al	Top	30-40	20°B		.009	.009	.012								
23H (1942)	Wauk6MKR	6-4⅛x4¾	Al	Top	35-1500	8°A	3A	.004	.010	.012	Ch	C7	18mm	.025	.020	TC	TC	80
25 (1942)	Wauk8MZR	6-4⅛x4¾	Al	Top	35-1500	8°A	3A	.004	.010	.012	Ch	C7	18mm	.025	.020	TC	TC	90
27 (1942)	Wauk6SRKR	6-4⅝x5⅛	Al	Top	40-1500	8°A	3A	.004	.010	.012	Ch	C7	18mm	.025	.020	TC	TC	90
STERLING																		
FB50 Del, FB60 Del, FB70 Del, FC90, FB70, FBT130	Wau 6BK	6-3¾x4¼	Al	Top	40-1500	TC	TC	.010	.010-.012	.004-.016	AC	86	18mm	.025				112
FB80, FD90	Wau 6MK	6-4⅛x4¾	Al	Top	40-1500	8°A	3A	.004	.008-.010	.014-.016	AC	86	18mm	.025				90
FC100, FD97	Wau 6SRL	6-4⅜x5⅛	Al	Top	40-	10°A	3A	.004	.006-.008	.016-.018	AC	78	⅞	.025				80
FDS180, FC135, FD115	Wau 6-125	8-4⅝x5⅛	CI	Top	40-	42°B	15B	.010	.010-.012	.018-.020	AC	85	18mm	.025				96
FBT152	Wau 6MZ	6-4⅛x4¾	Al	Top	40-	8°A	3A	.004	.008-.010	.014-.016	AC	86	18mm	.025				80
FBT152	Wau 6-110	6-4x4⅜	Al	Top	40-	10°B	5B	.010	.010-.012	.014-.016	AC	D8	18mm	.025				97
HC185, HC200, HC250, HC170, HCS210	Wau 6RB	6-5x5¾	CI	Top	40-	10°A	4A	.008	.006-.008	.010-.012	AC	76	⅞	.025				76
MB75, MD75, MS75, MD85, MB85	Wau 6BZ	6-4x4¼	Al	Top	40-1500	5°A	2A	.010	.010-.012	.014-.016	AC	86	18mm	.025				112
MB90, MD90	Wau 6MKR	6-4⅛x4¾	Al	Top	40-1500	8°A	3A	.004	.008-.010	.014-.016	AC	86	18mm	.025				90
JB90, JD90, HD105, HC105, HBT128, HWS128, HDS128	Wau 6MZR	6-4⅛x4¾	Al	Top	40-1500	5°A	3A	.004	.008-.010	.014-.016	AC	86	18mm	.025				90
HD110, HD115, HC115	Wau 6SRLR	6-4⅝x5⅛	Al	Top	40-1500	8°A	3A	.004	.008-.010	.016-.018	AC	86	⅞	.025				96
JAD135, JD137, HD145, HD165, JC137, JC145, HC145, HC147, HC156, HC165, HC175, JDS160, JWS160, HWS235S, HDS235S, HCS225	Wau 6SRKR	6-4⅝x5⅛	Al	Top	40-1500	8°A	3A	.004	.008-.010	.016-.018	AC	76	⅞	.025				96
HC185, HC200, HC250, HC255, HCS285, HCS300	Wau 6RBR	6-5x5¾	Al	Top	40-1500	10°A	4A	.008	.006-.008	.010-.012	AC	76	⅞	.025				90
STEWART																		
40A (1938)	Con F4162	4-3⅛x4⅝	CI	Top	40-2800			.010	.010	.014	Ch	7 COM	18mm	.025	.025	TC	TC	105
60A (1938)	Con F6170	6-3x4	CI	Top	40-2800	2°B	½B	.010	.010	.014	Ch	7 COM	18mm	.025	.025			
61A (1938)	Con F6218	6-3¼x4⅜	CI	Top	40-2800	2°B	½B	.012	.012	.018	Ch	7 COM	18mm	.025	.025			97
45A, 45AS (1938)	Wau 6ZKA	6-3⅝x4½	CI	Top	40-2800	8°A	2A	.010	.010	.016	Ch	7 COM	18mm	.025	.025			111
47A, 50A, 50AS (1938)	Wau 6BM	6-3⅝x4½	Al	Top	40-2800	TC	TC	.010	.010	.016	Ch	7 COM	18mm	.025	.025			111
49A (1938)	Wau 6BK	6-3¾x4¼	Al	Top	45-2800	TC	TC	.010	.010	.016	Ch	7 COM	18mm	.025	.025			112
51A (1938)	Con E602	6-4½x4¼	Al	Top	45-2800	TC	TC	.017	.017	.017	Ch	7 COM	18mm	.025	.025	TC	TC	102
58A (1938)	Wau 6MZ	6-4¼x4¾	Al	Top	40-2800	8°A	3A	.010	.012	.018	Ch	7 COM	18mm	.025	.025			90
38-5, 31X (1938)	Wau 6SRK	6-4⅝x5⅛	Al	Top	45-2200	10°A	3A	.010	.012	.018	Ch	2 COM	⅞	.025	.025			80
45GL (1938)	Wau 6BL	6-3½x4¼	CI	Top	40-2800	TC	TC	.010	.010	.016	Ch	7 COM	18mm	.025	.025			111
49A (1941-42)	Wau 6BZ	6-4x4¼	Al	Top	40-2800	TC	TC	.010	.010	.016	Ch	7 COM	18mm	.025	.025			112
58A, 59A (1941-42)	Wau 6MZR	6-4¼x4⅜	Al	Top	40-2800	8°A	3A	.010	.012	.018	Ch	7 COM	18mm	.025	.025			90
38A (1941-42)	Wau 6SRKR	6-4⅝x5⅛	Al	Top	40-2800	10°A	3A	.010	.012	.018	Ch	7 COM	18mm	.025	.025			80
STUDEBAKER																		
12, T4, T6, T8	Own	6-3¼x4⅝	CI	Top	20 Min.	5°A	1½A	.010	.006	.010	Ch	7	18mm	.025	.020	1°B		70
2T2, 2M2, 2TB2 (1936)	Own	6-3¼x4⅝	CI	Top	20 Min.	5°B		.020	.016	.016	Ch	8	18mm	.025	D	2°B	1B	
2W6, 2M6, 2MB6 (1936)	Wau 6BM	6-3⅝x4½	Al	Top	20 Min.	TC	TC	.010	.012	.014	Ch	7	18mm	.025	D	TC	TC	
2W7 (1936)	Wau 6BK	6-3¾x4¼	Al	Top	20 Min.	TC	TC	.010	.012	.014	Ch	7	18mm	.025	D	TC	TC	
W8, 2W8 (1936)	Wau 6-110	6-4x4⅜	Al	Top	20 Min.	15°B		.010	.012	.016	Ch	6M	18mm	.025	D	3°B	1B	80
J5 (1937)	Own	6-3¼x4⅝	Al	Top	40 Min.	5°B	1¾B	.020	.016C	.016C	Ch	8	18mm	.025	.020	2°B	¼B	101
J15, J15M, J15B (1937)	Own	6-3¼x4⅝	CI	Top	20 Min.	5°B	1¾B	.020	.016C	.016C	Ch	7B	18mm	.025	.020	2°B	¼B	101
J20, J20M, J20B (1937)	Her JXB	6-3⅝x4¼	Al	Top	35 Min.	2°A	5/16A	.010	.008H	.010H	Ch	2 COM	⅞	.025	.020	TC	TC	96
J25, J25M, J25B (1937)	Her JXD	6-4x4¼	Al	Top	35 Min.	5°A	1½A	.010	.006	.006	Ch	1 COM	⅞	.025	.020	TC	TV	95
K30, K30M, J30, J30M (1937-38)	Her WXC3	6-4¼x4½	Al	Top	35 Min.	2°A	5/16A	.010	.006	.006	Ch	1 COM	⅞	.025	.020	TC	TC	90
K5 (1938)	Own T	6-3⅛x4⅝	Al	Top	40 Min.	15°B	5½B	.020	.016C	.016C	Ch	8A	18mm	.025	D	2°B	¼B	95
K10 (1938-40)	Own OT	6-3⅛x4⅝	Al	Top	40 Min.	2½°B	1B	.020	.016C	.016C	Ch	8A	18mm	.025	D	2°B	¼B	95
K15, K15B, K15M (1938-40)	Own IT	6-3⅛x4⅝	Al	Top	40 Min.	15°B	5½B	.020	.016C	.016C	Ch	8A	18mm	.025	D	2°B	¼B	95
K20, K20M, K20MB (1938-40)	Her HXB	6-3⅝x4¼	Al	Top	35 Min.	2°A	5/16A	.010	.006	.006	Ch	7	18mm	.025	D	TC	TC	95
K25, K25M, K25MB (1938-40)	Her JXD	6-4¼	Al	Top	35 Min.	5°A	1½A	.010	.006	.006	Ch	7	18mm	.025	D	TC	TC	95
Coupe Express (1941-42)	Own	6-3x4	Al	Top	40 Min.	15°B		.020	.016	.016	Ch	J8B	14mm	.025	D	2°B		105
Standard (1941-42)	Own	6-3x4	Al	Top	40 Min.	15°B		.020	.016	.016	Ch	J8B	14mm	.025	D	2°B		105
Heavy Duty (1941-42)	Own	6-3⅛x4⅜	Al	Top	40 Min.	15°B		.020	.016	.016	Ch	8AB	18mm	.025	D	2°B		105
WALTER																		
FND	Wau 6MK	6-4⅛x4¾	CI	Top	40-1500	8°A	3A	.010	.010	.014	AC		14mm	.025	.020	25°A		
FMD	Wau 6SRL	6-4⅜x5⅛	Al	Top	50-1500	10°A	3A	.010	.010	.018	AC		⅞	.025	.020	25°A		
FKMD, FCKD, FCS	Wau 6SRK	6-4⅝x5⅛	Al	Top	50-1500	10°A	3A	.010	.010	.018	AC		⅞	.025	.020	25°A		
FBS, FBRS	Wau 6RB	6-5x5¾	Al	Top	40-1500	10°A	4A	.010	.010	.015	AC		⅞	.025	.020	25°A		

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ENGINE SERVICE SPECIFICATIONS — Continued

(Key to Abbreviations on pages 36 and 37)

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After		Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted)		SPARK PLUG				Breaker Point Gap	Spark Occurs °TC A-After	Spark Occurs Fly-Wheel Teeth °TC B-Before A-After	Comp. Pressures Cranking Speed
						°TC	Flywheel Teeth TC		Intake	Exhaust	Make	Type	Size	Gap				
WALTER—Continued																		
FN (1940-42)	Wau 6MKR	6-4½x4¾	Al	Top	40-1500	8°A	3A	.004	.008-10	.014-16			18mm	.025	.018			80
FM (1940-42)	Wau 6SRLR	6-4¾x5½	Al	Top	40-1500	8°A	3A	.004	.008-10	.014-16			⅞	.025	.018			80
FKM, FCK (1940-42)	Wau 6SRKR	6-4¾x5½	Al	Top	40-1500	8°A	3A	.004	.008-10	.016-18			⅞	.025	.018			80
FB, FBR (1940-42)	Wau 6RBR	6-5x5½	Al	Top	40-1500	10°A	4A	.008	.006-8	.010-12			⅞	.025	.018			80
FXB, FXR (1942)	Her HXE	6-5½x6	Al	Top	35-1600	5°B	Var	.010	.010	.016	Ch	O	⅞	.025	.020	TC	TC	
WHITE																		
54, 54A, 58S, 59, 59A, 64, 640, 641, 642, 643	Own 1A	6-4½x5¼	Al	Top	40-2400	TC	TC	.032	.020	.032	AC	E	⅞	P	A	8°A	3A	
60, 601C, 601, 602, 61	Own 2A	6-3½x4½	Al	Top	40-2400	TC	TC	.015	.015	.015	AC	E	⅞	P	A	TC	TC	79
65, 51AS, 58S, 59A, 620, 621, 63, 638, 631, 65K	Own 3A	6-4x5¼	Al	Top	40-2400	TC	TC	.032	.020	.025	AC	E	⅞	P	A	TC	TC	
61, 611, 612, 612K, 618, 618K	Own 4A	6-3¾x4½	Al	Top	40-2400	TC	TC	.015	.015	.015	AC	E	⅞	P	A	TC	TC	81
54, 640, 640K, 641, 641K, 642, 643, 691	Own 8A	6-4½x5¼	Al	Top	40-2500	10½°B	4B	.032	.020	.032	AC	D	18mm	P	A	TC	TC	108
65, 620, 620K, 621, 621K, 636, 636K, 631, 631K	Own 7A	6-4½x5¼	Al	Top	40-2100	TC	TC	.032	.020	.025	AC	E	⅞	P	A	TC	TC	83
701, 702, 707	Own 8A	6-3½x4½	Tp	Top	40-2800	5°A	1½A	.010	.010	.018	AC	W	18mm	S	A	5°B	1½B	
712, 718	Own 9A	6-3¾x4½	Tp	Top	40-2488	TC	TC	.010	.012	.020	AC	K	14mm	P	A	6°B	2B	
730, 731	Own 19AB	12-3½x3¾	Tp	Top	40-2400	10°B	4B	.010	.010	.016	AC	K	14mm	P	A	8°B	3B	121
703, 704, 704K, 709, 705, 805, 809	Own 11A	6-3½x4½	Tp	Top	40-2800	10°B	3½B	.010	.012	.020	AC	K	14mm	P	A	12°B	4B	116
806	Own 12A	12-3¾x3¾	Tp	Top	40-2400	10°B	3½B	.010	.010	.016	AC	K	14mm	P	A	8°B	2½B	105
730, 731	Own 12AB	12-3¾x3¾	Tp	Top	40-2400	10°B	4B	.010	.010	.016	AC	K	14mm	P	A	8°B	3B	116
704K2, 712SL, 706, 710, 816 (1936-37)	Own 13A	6-3¾x4½	Tp	Top	40-2400	10°B	3½B	.010	.012	.020	AC	K	14mm	P	A	12°B	4B	116
720, 720T (1936)	Own 14A	6-4x5¼	Al	Top	40-2400	TC	TC	.032	.020	.025	AC	E	⅞	P	A	TC	TC	121
722 (1936)	Own 18A	6-4¼x5¼	Al	Top	40-2200	TC	TC	.032	.020	.025	AC	E	⅞	P	A	TC	TC	93
709, 700K (1937)	Own 21A	6-3½x4½	Tp	Top	40-2800	10°B	3½B	.010	.012	.020	AC	K	14mm	P	A	12°B	4B	93
712NS, 718NS, 708M, 812, 818 (1937)	Own 16A	6-3½x4½	Tp	Top	40-2400	10°B	3½B	.010	.012	.020	AC	K	14mm	P	A	12°B	4B	116
826, 729	Own 18A	6-4¼x5¼	Al	Top	40 Max.	TC	TC		.020	.025	AC	E6	14mm	.025	.018	TC	TC	105
750, 750T, 850	Own 20A	6-3½x4½	Al	Top	35 Max.	15°B			0	0	Ch	J10	14mm	.025	.021	7°B		
784, 785, 788, 798	Own 24A	12-4¼x4¼	Al	Top	40 Max.	10°B			0	0	Ch	J10	14mm	.025	.015	3°B		110
722, 822	Own 25A	6-4½x5¼	Al	Top	40 Max.	TC	TC		.020	.025	AC	44	14mm	.025	.018	TC	TC	110
768, 718, 718, 810, 818	Own 30A	6-3½x4½	Al	Top	35 Max.	15°B			0	0	Ch	J10	14mm	.025	.018	1½B		
706, 706M, 708, 710, 718, 810, 818 (1940)	Own 30A	6-3½x4½	Al	Top	35 Max.	15°B			0	0	Ch	J10	14mm	.025	.018	1½B		110
White Horse (1940)	Own 32A	4-3¾x3½	CI	Top	40 Max.				0	0	Ch	J5	14mm	.025	.020	12°B		110
804, 1010, 810 (1940)	Own 29A	6-3½x4¼	Al	Top	25 Max.	2°B		.010	.006	.006	Ch	J8	14mm	.030	.029	TC	TC	
1012 (1940)	Own 33A	6-4¼x4¼	Al	Top	25 Max.	2°B		.010	.006	.006	Ch	J8	14mm	.030	.026	TC	TC	
WA14, WA114	Own 100A	6-3⅞x4½	Al	Top	35 Max.	15°B			0	0	Ch	JC10	14mm	.025	.018	7°B		122
WA18, WA118	Own 110A	6-3⅞x4½	Al	Top	35 Max.	15°B			0	0	Ch	JC10	14mm	.025	.018	7°B		117
WA20, W120, WA2064, WA16	Own 120A	6-3⅞x4½	Al	Top	35 Max.	15°B			0	0	Ch	JC10	14mm	.025	.018	7°B		112
WA22, WA26, WA34, WA122, WA126, WA134, WA2264	Own 140A	6-3⅞x5½	Al	Top	35 Max.	15°B			0	0	Ch	JC10	14mm	.025	.018	7°B		112
White Horse (1941)	Own 35A	4-3¾x3½	CI	Top	40-2000				0	0	Ch	J8	14mm	.030	.029	11½°B		
782	Own 140TA	6-3⅞x5½	Al	Top	35 Max.	15°			0	0	Ch	JC10	14mm	.025	.018	7°B		112
WILLYS																		
38, 48, 440P	Own	4-3½x4⅜	CS	Top	30-30	TC	TC	.010	.004	.006	Ch	C7	18mm	.025	.020	8°A	1½A	97
440	Own	4-3½x4⅜	Al	Top	75-30	9°B	2½B	.020	.014	.020	Ch	J8	18mm	.030	.020	TC	TC	107
441, 441P	Own	4-3½x4⅜	Al	Top	75-30	9°B	2½B	.020	.014	.020	Ch	J9	18mm	.030	.020	TC	TC	107
442, 442P	Own	4-3½x4⅜	Tp	Top	75-30	9°B	2½B	.020	.014	.020	Ch	J9	18mm	.030	.020	TC	TC	107

Engines

BUDA																		
	HP205	4-3¼x4½	CI	Top	40-1400	TC	TC	.006	.006	.009	AC	87	18mm	.025	.018			97
	HP217	4-3¼x4¾	CI	Top	40-1400	TC	TC	.006	.006	.009	AC	87	18mm	.025	.018			94
	HP260	6-3½x4½	CI	Top	40-1400	TC	TC	.006	.006	.009	AC	87	18mm	.025	.018			97
	HP298	6-3½x4½	CI	Top	40-1400	TC	TC	.006	.006	.009	AC	87	18mm	.025	.018			97
	HP326	6-3¼x4¾	Al	Top	40-1400	TC	TC	.006	.006	.009	AC	87	18mm	.025	.018			103
	HP351	6-3¼x5½	Al	Top	40-1400	TC	TC	.006	.006	.009	AC	87	18mm	.025	.018			103
	K369	6-4⅛x4¾	SS	Top	40-1400	TC	TC	.006	.006	.009	AC	87	18mm	.025	.018			97
	K393	6-4⅛x4¾	CI	Top	40-1400	TC	TC	.006	.006	.009	AC	87	18mm	.025	.018			98
	K428	6-4½x4¾	Al	Top	40-1400	TC	TC	.006	.006	.009	AC	87	18mm	.025	.018			102
	L525	6-4½x5½	CI	Top	40-1600	TC		.006	.006	.009	AC	87	18mm	.025	.018			97
	LO525	6-4½x5½	Al	Top	40-1600	10°B		.009	.009	.018	AC	K7	18mm	.025	.018			93
	GF638	6-4¾x6	CI	Top	35-1400	5°B		.010	.010	.016	AC	87	18mm	.025	.018			97
	M766	6-5x6½	Al	Top	35-1200	10°B		.015	.010	.016	AC	87	18mm	.025	.018			93
	4DT212	4-3⅝x5½	Al	Top	40-1600	20°B		.009	.009	.012		Die	sel					390
	4DT226	4-3¾x5½	Al	Top	40-1600	TC	TC	.009	.009	.012		Die	sel					390
	6DT278	6-3⅝x4½	Al	Top	40-1600	20°B		.009	.009	.012		Die	sel					
	6DT294	6-3⅝x4¾	Al	Top	40-1600	20°B		.009	.009	.012		Die	sel					660
	6DT317	6-3⅝x5½	Al	Top	40-1600	12°B		.009	.009	.012		Die	sel					
	6DT389	6-3⅞x5½	Al	Top	35-1600	12°B		.009	.009	.012		Die	sel					
	6DT468	6-4¼x5½	Al	Top	35-1600	12°B		.009	.009	.012		Die	sel					
	6DH691	6-4¾x6½	Al	Top	35-1600	18°B		.015	.009	.012		Die	sel					
CONTINENTAL																		
	C400	4-3⅜x4	Tp	Top	35-2500			.012	.010C	.010C			18mm					100
	F6170	6-3x4	Tp	Top	30-2000			.014	.014C	.014C			18mm					
	F6199	6-3⅛x4	Tp	Top	30-2000			.014	.014C	.014C			18mm					
	F6209	6-3⅞x4⅜	Tp	Top	30-2000			.014	.014C	.014C			18mm					85
	F6218	6-3⅛x4⅜	Tp	Top	30-2000			.014	.014C	.014C			18mm					97
	A6244	6-3⅞x4⅜	Al	Top	50-2500			.014	.014C	.014C			18mm					114
	20C	6-3⅝x4⅜	Al	Top	35 Max.			.012	.008H	.010H			⅞					93
	E600	6-3½x4½	Tp	Top	40-2600			.018	.018C	.022C			18mm					102
	E601	6-3⅞x4½	Tp	Top	40-2600			.018	.018C	.022C			18mm					97
	E602	6-4½x4½	Tp	Top	40-2600			.018	.018C	.022C			18mm					102
	E603	6-4¼x4½	Tp	Top	40-2600			.018	.018C	.022C			18mm					99
	20R	6-4½x4¾	Al	Top	30-2300			.014	.013C	.018C			18mm					88
	21R	6-4⅝x4¾	Al	Top	30-2300			.014	.013C	.018C			18mm					79
	22R	6-4½x5½	Al	Top	30-2300			.014	.013C	.018C			18mm					74
	Y4089	4-2½x3½	CI	Top	35-40			.012	.012C	.012C			18mm					105
	Y4091	4-2⅞x3½	CI	Top	35-40			.012	.012C	.012C			18mm					105
	F4124	4-3x4⅜	Tp	Top	35-40			.014	.014C	.014C			18mm					105
	F4140	4-3⅞x4⅜	Tp	Top	35-40			.014	.014C	.014C			18mm					105
	F4162	4-3⅞x4⅜	Tp	Top	35-40			.014	.014C	.014C			18mm					109
	M6271	6-3⅝x4⅜	Tp	Top	55-1200			.0175	.017C	.022C			18mm					99
	M6290	6-3⅝x4⅜	Tp	Top	55-1200			.0175	.017C	.022C			18mm					101
	M6330	6-4x4⅜	Tp	Top	55-1200			.0175	.017C	.022C			18mm					
	M6253	6-3½x4⅜	Tp	Top	55-1200			.0175	.017C	.022C			18mm					126
	B6371	6-4⅛x4⅜	Al	Top	13-300			.022	.017C	.025C			18mm					123
	B6405	6-4⅛x4⅜	Al	Top	13-300			.022	.017C	.025C			18mm					124

ENGINE SERVICE SPECIFICATIONS — Continued

(Key to Abbreviations on pages 36 and 37)

TRUCK MAKE AND MODEL	Engine Make and Model	Number of Cylinders, Bore and Stroke	Piston Material	Connecting Rods Removed From	Normal Oil Pressure Lb. at M.P.H. or R.P.M.	Intake Valve Opens B-Before A-After °TC	Intake Valve Opens B-Before A-After Flywheel Teeth TC	Intake Tappet Clearance for Valve Timing	OPERATING TAPPET CLEARANCE (Hot unless noted) Intake	OPERATING TAPPET CLEARANCE (Hot unless noted) Exhaust	SPARK PLUG Make	SPARK PLUG Type	SPARK PLUG Size	SPARK PLUG Gap	Breaker Point Gap	Spark Occurs °TC B-Before A-After	Spark Occurs Fly-Wheel Teeth °TC B-Before A-After	Comp. Pressure at Cranking Speed
HERCULES																		
	ZXA	4-2¼x3	CI	Top	15-1000	5°A	Var	.006	.006	.008			14mm	.025	.020	TC	TC	Opt
	ZXB	4-2⅝x3	CI	Top	15-1000	5°A	Var	.006	.006	.008			14mm	.025	.020	TC	TC	Opt
	IX	4-2½x4	CI	Top	15-1000	5°A	Var	.006	.006	.008			18mm	.025	.020	TC	TC	Opt
	IXF	4-2¾x4	CI	Top	15-1000	5°A	Var	.006	.006	.008			⅞	.025	.020	TC	TC	Opt
	IXA	4-3x4	Var	Top	15-1000	5°A	Var	.006	.006	.008			⅞	.025	.020	TC	TC	Opt
	IXK	4-3⅛x4	CI	Top	15-1000	5°A	Var	.006	.006	.008			⅞	.025	.020	TC	TC	Opt
	IXB	4-3¼x4	Var	Top	15-1000	5°A	Var	.006	.006	.008			⅞	.025	.020	TC	TC	Opt
	OOA	4-3½x4½	Var	Top	15-1000	5°A	Var	.010	.008	.012			⅞	.025	.020	TC	TC	Opt
	OOB	4-3¾x4½	Var	Top	15-1000	5°A	Var	.010	.008	.012			⅞	.025	.020	TC	TC	Opt
	OOC	4-4x4½	Var	Top	15-1000	5°A	Var	.010	.008	.012			⅞	.025	.020	TC	TC	Opt
	QXA	6-3½x4½	Var	Top	26-1600	5°B	Var	.010	.006	.008			⅞	.025	.020	TC	TC	Opt
	QXB	6-3¼x4¼	Var	Top	26-1600	5°B	Var	.010	.008	.008			⅞	.025	.020	TC	TC	Opt
	QXC	6-3⅜x4⅛	Var	Top	26-1600	5°B	Var	.010	.006	.008			⅞	.025	.020	TC	TC	Opt
	QXD	6-3 1/16x4⅛	Al	Top	26-1600	5°B	Var	.010	.006	.008			⅞	.025	.020	TC	TC	Opt
	JXA	6-3⅜x4¼	Var	Top	26-1600	5°A	Var	.010	.008	.010			⅞	.025	.020	TC	TC	Opt
	JXF	6-3½x4¼	Al	Top	26-1600	5°A	Var	.010	.008	.010			⅞	.025	.020	TC	TC	Opt
	JXG	6-3½x4¼	Al	Top	26-1600	5°A	Var	.010	.008	.010			⅞	.025	.020	TC	TC	Opt
	JXE3	6-3½x4¼	Al	Top	26-1600	5°A	Var	.010	.008	.010			⅞	.025	.020	TC	TC	Opt
	JXB	6-3⅝x4¼	Var	Top	26-1600	5°A	Var	.010	.008	.010			⅞	.025	.020	TC	TC	Opt
	JXC	6-3⅝x4¼	Var	Top	26-1600	5°A	Var	.010	.008	.010			⅞	.025	.020	TC	TC	Opt
	JXD	6-4x4¼	Var	Top	26-1600	5°A	Var	.010	.008	.010			⅞	.025	.020	TC	TC	Opt
	WXC	6-4x4⅛	Var	Top	26-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	WXC2	6-4¼x4½	Var	Top	26-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	WXC3	6-4¼x4½	Var	Top	26-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	WXLC	6-4x4¾	Al	Top	26-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	WXLC3	6-4¼x4¾	Al	Top	26-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	YXC	6-4¼x4⅝	Var	Top	26-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	YXC2	6-4½x4¾	Var	Top	26-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	YXC3	6-4⅝x4¾	Var	Top	26-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	RXB	6-4½x5¼	Al	Top	26-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	RXC	6-4⅝x5¼	Al	Top	36-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	RXLC	6-4⅝x5¼	Var	Top	36-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	RXLD	6-4¾x5¼	Var	Top	36-1600	2°A	Var	.010	.006	.010			⅞	.025	.020	TC	TC	Opt
	HXB	6-5x6	Al	Top	35-1600	5°B	Var	.015	.010	.016			⅞	.025	.020	TC	TC	Opt
	HXC	6-5¼x6	Al	Top	35-1600	5°B	Var	.015	.010	.016			⅞	.025	.020	TC	TC	Opt
	HXD	6-5½x6	Al	Top	35-1600	5°B	Var	.015	.010	.016			⅞	.025	.020	TC	TC	Opt
	HXE	6-5¾x6	Var	Top	35-1600	5°B	Var	.015	.010	.016			⅞	.025	.020	TC	TC	Opt
	DOOB	4-3¾x4½	Al	Top	30-1200	12°B	Var	.010	.010	.010		Die sel						500
	DOOC	4-4x4½	Al	Top	30-1200	12°B	Var	.010	.010	.010		Die sel						500
	DOOD	4-4¼x4½	Al	Top	30-1200	12°B	Var	.010	.010	.010		Die sel						500
	DJXB	6-3½x4½	Al	Top	45-2000	12°B	Var	.010	.010	.010		Die sel						475
	DJXC	6-3¾x4½	Al	Top	45-2000	12°B	Var	.010	.010	.010		Die sel						475
	DRXB	6-4⅝x5¼	Al	Top	30-1200	12°B	Var	.016	.010	.016		Die sel						475
	DRXC	6-4⅝x5¼	Al	Top	30-1200	12°B	Var	.016	.010	.016		Die sel						475
	DHXB	6-5x6	Al	Top	30-1200	5°B	Var	.015	.010	.016		Die sel						475
	DFXB	6-5x6	Al	Top	40-1200	5°B	Var	.015	.010	.016								475
	DHXC	6-5¼x6	Al	Top	30-1200	5°B	Var	.015	.010	.016		Die sel						475
	DFXC	6-5¼x6	Al	Top	40-1200	5°B	Var	.015	.010	.016		Die sel						475
	DFXD	6-5½x6	Al	Top	40-1200	5°B	Var	.015	.010	.016		Die sel						475
LYCOMING																		
(1933)	SC	6-3⅛x4½	CI	Bot	40 Max.	5°A	1¾A	.010	.008-.008	.010-.012			⅞	.025	.018			
(1929-34)	TS	6-3⅞x5	CI	Top	40 Max.	5°A	1¾A	.010	.006-.008	.010-.012			⅞	.025	.018			
(1933) on	AEF	8-3¾x4¾	Al	Top	40 Max.	5°B	1¾B	.012	.008-.010	.010-.012			18mm	.025	.018			
(1930-33)	ASB	6-3¾x4½	CI	Top	40 Max.	5°A	1¾A	.012	.008-.010	.010-.012			18mm	.025	.018			
(1929-33)	ASD	6-3¾x4½	CI	Top	40 Max.	5°A	1¾A	.012	.008-.010	.010-.012			18mm	.025	.018			
(1934) on	ASE	6-3¾x4½	Al	Bot	40 Max.	5°A	1¾A	°012	.003-.010	.010-.018			18mm	.025	.018			
(1930) on	AFE	4-3¾x4½	CI	Bot	40 Max.	TC	TC	.008	.006-.008	.008-.008			⅞	.025	.018			
(1934) on	GF	8-3 1/16x4¾	Al	Bot	40 Max.	7½°B	2½B	.012	.008-.010	.008-.010			18mm	.025	.018			
(1934) on	WFC	6-3 1/16x4¾	Al	Bot	40 Max.	7½°B	2½B	.012	.008-.010	.008-.010			14mm	.025	.018			
(1938) on	DC	4-3 1/16x3 7/8	Al	Bot	35 Max.	7°B		.012	.010-.012	.010-.012			18mm	.025	.018			
WAUKESHA																		
	6BK	6-3¾x4¼	Al	Top	40-1500	5°A	1¼A°	.010	.010-12C	.014-16C	Opt		18mm	.025	.018	Var		112
	6MS	6-3¾x4¾	CI	Top	40-1500	8°A		.004	.008-12C	.012-14C	Opt		18mm	.025	.018	Var		86
	6ML	6-4x4¾	CI	Top	40-1500	8°A	3A	.004	.008-10C	.014-16C	Opt		18mm	.025	.018	Var		89
	6MK	6-4¼x4¾	CI	Top	40-1500	8°A	3A	.004	.008-10C	.014-16C	Opt		18mm	.025	.018	Var		80
	6MZ	6-4¼x4¾	CI	Top	40-1500	8°A	3A	.004	.008-10C	.014-16C	Opt		18mm	.025	.018	Var		90
	6SRL	6-4⅝x5¼	CI	Top	40-1500	10°A	3A	.004	.008-10C	.016-18C	Opt		⅞	.025	.018	Var		90
	6SRK	6-4⅝x5¼	Var	Top	40-1500	10°A	3A	.004	.008-10C	.016-18C	Opt		⅞	.025	.019	Var		90
	6AB	6-4½x5¾	CI	Top	40-1500	10°A		.008	.004-08C	.008-10C	Opt		⅞	.025	.018	Var		76
	6RB	6-5x5¾	Al	Top	40-1500	10°A	4A	.008	.008-08C	.010-12C	Opt		⅞	.025	.018	Var		90
	6BL	6-3¾x4¼	Al	Top	40-1500	5°A		.010	.010-12C	.014-16C	Opt		18mm	.025	.018	Var		112
	6-90	6-3⅝x4¾	Al	Top	40-1500	5°B		.010	.010-12C	.014-16C	Opt			.025	.018	Var		98
	6-110	6-4x4¾	Al	Top	40-1500	15°B	5B	.009	.010-12C	.014-16C	Opt		18mm	.025	.018	Var		97
	6-125	6-4⅝x5¼	Al	Top	40-1500	42°B	15B	.008	.010-12C	.018-20C	Opt		18mm	.025	.018	Var		96
	6SRS	6-4¼x5¼	CI	Top	40-1500	10°A		.004	.008-10C	.016-18C	Opt		⅞	.025	.018	Var		80
	6BA	6-3⅝x4¼	CI	Top	40-1500	TC	TC	.010	.010-12C	.012-14C	Opt		18mm	.025	.018	Var		112
	6BM	6-3⅝x4¼	Al	Top	40-1500	5°A	1¼°A	.010	.010-12C	.014-16C	Opt		18mm	.025	.018	Var		112
	6ZKA	6-3⅝x4⅛	CI	Top	40-1500	8°A	2A	.004	.008-10C	.012-14C	Opt		18mm	.025	.018	Var		111
	6GAL	6-5x5½	CI	Top	40-1500	TC	TC	.008	.015-17C	.024-26C	Opt		18mm	.025	.018	Var		112
	6GAK	6-5½x5½	CI	Top	40-1500	TC	TC	.008	.015-17C	.024-26C	Opt		18mm	.025	.018	Var		112
	6BKH	6-3¾x4¼	Al	Top	40-1500	5°A	2A	.006	.010-12C	.018-20C	Opt		18mm	.025	.018	12°B		135
	6BZ	6-4x4¼	Al	Top	40-1500	5°A	1¼A	.010	.010-12C	.014-16C	Opt		18mm	.025	.010	Var		112
	6WAL	6-5¾x6½	Al	Top	40-1500	TC	TC	.012	.018-20C	.025-27C	Opt		18mm	.025	.018	Var		35
	6WAK	6-6¼x6½	Al	Top	40-1500	TC	TC	.012	.018-20C	.025-27C	Opt		18mm	.025	.018	Var		85
	6WALH	6-5¾x6½	Al	Top	40-1500	TC	TC	.012	.018-20C	.025-27C	Opt		18mm	.025	.018	17°		125
	6WAKH	6-6¼x6½	Al	Top	40-1500	TC	TC	.012	.018-20C	.025-27C	Opt		18mm	.025	.018	17°		125
	6MKR	6-4¼x4¾	Al	Top	40-1500	8°A	3A	.004	.008-.010	.014-.016	Opt		18mm	.025	.018	Var		80
	6MZR	6-4¼x4¾	Al	Top	40-1500	8°A	3A	.004	.008-.010	.014-.016	Opt		18mm	.025	.018	Var		90
	6SRLR	6-4⅝x5¼	Al	Top	40-1500	8°A	3A	.004	.008-.010	.014-.016	Opt		⅞	.025	.018	Var		90
	6SRKR	6-4⅝x5¼	Al	Top	40-1500	8°A	3A	.004	.008-.010	.014-.016	Opt		⅞	.025	.018	Var		90
	6RBR	6-5x5¾	Al	Top	40-1500	10°A	4A	.008	.006-.008	.010-.012	Opt		18mm	.025	.018	Var		90
	130HS, 130GS	4-3¾x5	CI	Top	40-1500	5°A	1½A	.012	.009-11C	.014-16C	Opt		18mm	.025	.018	16°B		130
	130HL, 130GL	4-4x5	CI	Top	40-1500	5°A	1½A	.012	.009-11C	.014-16C	Opt		18mm	.025	.018	16°B		130
	140HS, 140GS	6-4¼x5½	Al	Top	40-1500	5°A	1¾A	.010			Opt		18mm	.025	.018	16°B		130
	140HK,140GK	6-4½x5½	Al	Top	40-1500	5°A	1¾A	.010			Opt		18mm	.025	.018	16°B		130
	145HS, 145GS	6-4¾x6	Al	Top	40-1500	5°A	4A	.006	.009-11C	.024-26C	Opt		18mm	.025	.018	16°B		130
	145HK,145GK	6-5¼x6	Al	Top	40-1500	5°A	4A	.006	.009-11C	.024-26C	Opt		18mm	.025	.018	16°B		130

FRONT END ALIGNMENT

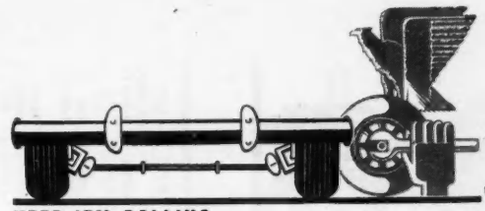
N—Negative

TRUCK MAKES AND MODELS	TOE-IN (In inches unless otherwise shown)	CAMBER (In degrees)	CASTER (In degrees)	KING PIN SLANT (In degrees)
AUTOCAR				
RG, RH, RHT, 6RH, UT, UNF, UTT, UNFT (1935-36)	0–¼	1	2½	8
D, 9T, 6D, UDT, 6UDF, RHD (1935-36)	0–¼	1	1¾	8
DF, DFT, 6DF, DH, S (1935-36)	0–¼	1	1	8
N (1935-36)	0–¼	1	½	8
NT, DP (1935-36)	0–¼	1	1¼	8
NF, 6N (1935-36)	0–¼	1	¼	8
NFT (1935-36)	0–¼	1	¾	8
T, 6T, UDFT, UNT, 6NF (1935); 6NF (1936)	0–¼	1	1½	8
TT, UDP (1935); T, 6T, UDFT, UNT, TT, UDF (1936)	0–¼	1	2	8
UDF (1935-36)	0–¼	1	1¾–2¼	8
UN (1935-36)	0–¼	1	3¼	8
UNFT, 6UN (1935-36)	0–¼	1	2¾	8
6UT (1935-36)	0–¼	1	¼N	8
C (1935-36)	0–¼	1	0	8
UD, 6UD, US, UNF (1936)	0–¼	1	2¼	8
TF, 6TF (1936)	0–¼	1	½N	8
TFT (1936)	0–¼	1	¾–1N	8
6X2RL (1937)	0–¼	1	2½	8
RM, RL, RLD (1937); A, 6X2FL (1938)	0–¼	1	2¼–2½	8
D, 2TR, 3TR, 4TR, 6X2DF (1937); D, 3TR (1938)	0–¼	1	2 –2¼	8
RMT, 1TR (1937); 1UTR, 2UTR, 3UTR (1937-38); 4TR, RLD, 6X4DF (1938)	0–¼	1	2	8
DF, DP (1937-38)	0–¼	1	1¾–2	8
UD (1937); RMT, 1TR, UD, 6X2UD (1938)	0–¼	1	1½–2	8
5TR (1937)	0–¼	1	1¼–2	8
6X2UD (1937); 4UTR (1937-38); DH (1938)	0–¼	1	1½–1¾	8
N (1937-38)	0–¼	1	1¼–1¾	8
DH (1937); NF, 5UTR (1937-38)	0–¼	1	1¼–1½	8
T (1937)	0–¼	1	½–1	8
6X2T (1937-38); 6X4TO (1938)	0–¼	1	¾	8
6X2NF (1937)	0–¼	1	¼– ¾	8
CP (1937)	0–¼	1	¼	8
S, 6X2UT (1937)	0–¼	1	0 – ¼	8
6X2UNF (1937)	0–¼	1	N¼– ¼	8
UNF, UDP, US (1937); C, 6X4TC (1938)	0–¼	1	0	8
UN, UT (1937-38); UNF, UDP, 6X2UN, 6X2UNF, 6X2UT (1938)	0–¼	1	N¼–0	8
UDF, 6X2UN (1937); UDF, US, 6X4TD, 6X4UTO, 6X4UTD (1938)	0–¼	1	N¼	8
B, RM, RL, 2TR (1938)	0–¼	1	2 –2½	8
5TR, 6X2DF (1938)	0–¼	1	1¾–2¼	8
UA (1938)	0–¼	1	1½–2½	8
UB (1938)	0–¼	1	1¼–2½	8
T, 6X2NF (1938)	0–¼	1	¾–1¼	8
A, B, RL, RB (1939); C10, C20, C30, C40 (1940-42)	0–¼	1	¼–1¾	8
RLS, DF, 6X4DF, URB, URL, URLS (1939)	0–¼	1	N¼–1 ¼	8
N, NF, T, 4TR, 5TR, 6X2NF, 6X2T, UA, UB, 1UTR, 2UTR, 3UTR, 6X2UD (1939)	0–¼	1	N½–1	8
D, RFT, 1TR, 2TR, 3TR, RLD, 6X2DF (1939); C10T, C20T, C30T, C40T, C40D, C4064, C50D, C50T, C60, C7062, C7064, C70, U4062 (1940-42)	0–¼	1	0 –1½	8
DP, DH, UD (1939); U80, C70D, U7064 (1940-42)	0–¼	1	N¾– ¾	8
S, C (1939); C80D, C90D (1940-42)	0–¼	1	N1½–0	8
6X2RL (1939); C4062 (1940-42)	0–¼	1	½–2	8
6X4TO (1939)	0–¼	1	N1 –1¼	8
6X4TC (1939); C8064, C9064, DU100T (1940-42)	0–¼	1	N1 –1½	8
6X4TD, UDF, UN, UNF, 6X2UN, 6X2UNF (1939); U80D, U8062 (1940-42)	0–¼	1	N1¼–1¼	8
UT, 4UTR, 5UTR, 6X2UT (1939); U90, U90T, U9062 (1940-42)	0–¼	1	N1 –0	8
UDP, 6X4UTO (1939); U80D, U8064 (1940-42)	0–¼	1	N1½–½N	8
US, 6X4UTD (1939); U70, U80, U80D, U8062, U90D, U9064 (1940-42)	0–¼	1	N1¼–¼N	8
4X4N, 4X4S (1939)	0–⅛T	1	5 –7	8
U10, U20, DC100T (1940-42)	0–¼	1	N1½–1½	8
U10T, U20T, U30T, U40T, U40D, U7062, C80, C8062, C90, C9062 (1940-42)	0–¼	1	N1½–1	8
U30, U40, C50, U50 (1940-42)	0–¼	1	N1¼–1¼	8
C60T, C70T, C80T, C90T (1940-42)	0–¼	1	1 –2	8
C6044, C7044, C8044, C9044, DC10044 (1940-42)	0–⅛T	0	3 –6	0
C80T, C90T (1940-42)	0–¼	1	N1 –2	8
DC100D, DC10064, DC10062, DC10064, DU10062, DU10064 (1940-42)	0–¼	1	N2½–N1½	8
U60T, U70T, DC100T (1941-42)	0–¼	1	½–1½	8
U80T (1941-42)	0–¼	1	0 –1	8
BANTAM 60	1/16–⅛	½	11	1½
65	1/16–⅛	1¼	15	1½
BROCKWAY				
80, 90 (1932-33)	1/16–⅛	2	1 –2	9
120, 140 (1930-33); 100, 150 (1933); 90X, 96, 110, 125X, 130, 145, 150X4, 150X5 (1935)	1/16–⅛	1	1 –2	7
141, 170, 195, 220 (1930-33); 160, 260 (1932-33); 160X, 165X, 190X (1935-41); 162, 166, 170X, 175X, 195X, 220X, 240X, 260X (1935-42)	1/16–⅛	2	1 –2	0
87, V1200 (1935-36); 125X, 130, 145, 150X4, 150X5, 96, 110 (1936-41); 78, 83, 88, 92, 94, 112, 128, 148, 147, 152, 153, 154, 156 (1936-42)	1/16–⅛	1	1 –2	8
CHEVROLET				
½-Ton (1935-42); ¾-Ton (1937-42)	1/16–⅛	½–1½	1¼–2¼	7⅛°
1-Ton (1937-38)	1/16–⅛	½–1½	1¼–2¼	7⅛°
1-Ton (1939-42); 1½-Ton (1935-42)	1/16–⅛	½–1½	2¼–3¼	7⅛°
1½-Ton C.O.E. (1940-42)	1/16–⅛	½–1½	2½–3½	8°
CORBITT All 2-wheel drive (1936-38)	1/16–⅛	1	1½–2½	8
All 2-wheel drive (1939-41)	1/16–¼	1	2 –3½	8
All front-wheel drive (1939-41)	1/16–¼	0	5 –7	0

TRUCK MAKES AND MODELS	TOE-IN (In inches unless otherwise shown)	CAMBER (In degrees	CASTER (In degrees)	KING PIN SLANT (In degrees)
DIAMOND T				
210, 211, 226	1/8	1	1½	9
241, 261	1/8	2	2½	9
311, 326B, 325DR, 351, 376	1/8	2	2½	7½
410A	1/4	2	3	7½
425, 510, 525, 603A, 801A, 740, 750	1/4	2	3	0
1515, 1201, 1203, 1602A, 1603, 2501	1/4	2	4½	0
243, 311C, 312, 351C, 352 (1935	1/8	2	2½	7½
412B, 412DR, 512B, 512DR (1935)	1/8	1	2½	7½
211A, 220, 227 (1935); 212A, 212B, 221, 228 (1936-37)	1/8	1	1½	9
244, 313, 320, 353, 360 (1936-37)	1/8	2	1½	8
412B, 412DR, 512B, 512DR (1936-37)	1/8	1	2½	8
80 (1936-37)	1/8	1	3½	9
80, 301, 304 (1938); 201, 305, 306, 308SC (1939-42)	1/8	1	4⅝	9
404SC, 509SC, 612SC, 614SC, 404, 405, 406, 513, 615 (1938-42)	1/8	1	1½	9
509, 611, 612, 613, 614, 513, 401, 402, 507, 607, 609, 508, 610, 404C, 509C, 513C, 612C, 614C (1938-42)	1/8	1	1½	8½
412DR, 512B, 512DR, 805H, 805W, 805B, 806BW, 805DR, 805DRW, 806H, 806W, 807W, 808W, 900W (1938-40)	1/8	1	2½	8
802, 803, 804, 803C, 804C, 615C, 803C, 804C (1938-42)	1/8	1	1½	8
201C, 305C, 306C (1940-42)	1/8	1	1	9
DODGE				
KC, KCL (1935)	1/8	1	2	
KH31A, KH32A, KH33A, K32A, K33A, K34A (1935)	1/32–1/32	2	1½	
LE-30, LE-31, LE-32, FD3-29, FD3-36, FD3-82, LF-35, LF-36, LF-37, FD4-29, FD4-36, FD4-62, LF-38, LF-39, FDD4-62, FDD4-85 (1936)	1/32–1/32	2	1½	7
K45A, K46A, K47A, K48A (1935)	1/32–1/32	2	1¾	7
LH-45, LH-46, LH-47, LH-48, FD6-36, FD6-51, FD8-12, FD6-60 (1936)	1/32–1/32	2	1¾	7
K52 Special (1935)	5/8	2	3½	9
K60A, K61A, K62A (1935); LM-70, LM-71, LK-60, LK-61, LK-62, LK-63 (1936); ML, MK (1937)	1/32–1/8	1	2	8
RL, RK (1936); TL, TK, TLD, TKD (1939)	1/32–1/8	1	2	8
VL, VK, VLD, VKD, WL, WK, WLD, WKD (1940-42)	1/32–1/8	1	2	8
LC, FD1-16	1/8	1	2	9
MC, FE1-16, PT-50, MD, FE2 (1937); RC, RD (1938); TC, TD-15, TD-20, TD-21 (1939); VC, VD, WC, WD	1/8	1½	2	4
ME, FE3, MF, FE4 (1937); RE, RF (1938); TE, TF, TG, TH (1939); VF (1940); WF (1942)	1/16–1/8	2	1½	7
MG, MH, FE6 (1937); RG, RH (1938); VM, VG, VH (1940); WFM, WG, WH, WGM, WHM (1942)	1/32–1/8	2	2	7
MO, MP (1937); RO, RP (1939)	1/16–1/4	1	2½	8
FEDERAL				
X, X8 (1930-36)	1/4	1	2¾	0
(1933)	1/4	2	3½	0
A7, A8, 30, 36, 37, 40 (1931-35)	1/4	2	3	7½
15A, 15B, 15X, 20A, 20B, 20C, 21, 22 (1933-34)	1/4	1	1¾	7½
25A, 25B (1933-34)	1/4	2	1¾	7½
C7, C7W, C8, C8W (1934-36)	1/4	1	2½	8
15D, 18D, 20D, 25D (1935)	1/4	1	1¾	7½
T10B, T10W (1937)	1/32	1	3	9½
X8, X8R (1937)	1/16	1	2¾	0
10E, 9, 9E, 11, 11E, 15D, 18D, 20D, 25D, 28D, 29D, 40E, 50E, 50H, C7, C8, C7W, C8W (1936-38)	3/32	1	3	8
11, 11K, 12, 12K, 14, 14K, 15, 15K, 18, 18K, 20, 20K 25, 25K, 29, 29K, 35, 40F, 45, 50F, 55, 62, 63, 65, 66, 75, 75K, 80, 80K, 85, 85K, 89, 89K, 90, 92, 94	1/32	1	3	8
7, 8	1/8	1	3½	8
FORD				
A Commercial Car (1928-31)	1/32	2–¼	6½–3½	7
AA Truck (1928-31)	1/32	2–¼	5 –3	7
B (4 and 8 cyl.) Commercial Car (1932)	1/32	2–¼	9 –4½	7
BB (4 bd and 8 cyl.) Truck (1932-34)	1/32	2–¼	5 –3	7
48 Commercial (1933-34); 50 Commercial (1935)	1/32	2–¼	9 –4½	8¼
51 Truck (1935-36)	0	¾–¼	5 –3	8¼
67 Commercial Car (1936)	1/8	¾–¼	9 –4½	8¼
73, 77 Commercial Car (1937)	1/8	1–¼	9 –4½	8¼–8
75, 79 Truck (1937)	0	¾–¼	5 –3	8½–8
81T, 817T (1938); 91T, 99T, 917T, 997T (1939) Trucks	0	¾	5	8¼
81Y, 82Y (1938); 91Y, 92Y (1939) 1-Ton	1/10	¾	8	8
81C, 82C (1938); 91C, 922C (1939) Commercial	1/8	1	8	8
911W, 991W, 91W, 99W, 917W (1939) (C.O.E.)	0	¾	1 –3½	8¼
018T, 098T, 01T, 09T (1940 Reg.)	1/8	¾	3	8¼
01W, 09W, 011W, 091W (1940 C.O.E.)	1/8	¾	1 –3½	8¼
P2D, 01D, 02Y, 01Y (1940 ¾-and 1-Ton)	1/8	¾	3	8
022C, 01C (1940 Comm.)	1/8	¾	8	8
118T, 119T, 11T, 19T (1941 Reg.)	1/8	¾	3	8¼
11W, 19W, 111W, 191W (1942-42)	1/8	¾	4⅓	8¼
110, 11Y, 1NY (1941-42 ¾-and 1-Ton)	1/8	1	3	8
11C, 1NC (1941-42 Comm.)	1/8	1	8	8
FWD				
HS, HA, HR, HG, MJ6, M6, M7, M10, MJ6X6, M6X6, T-26, T-30, T-32	1/8	1½	2	4½
CU, CUA, SU, SUA, YU	1/8	1½	2	0
GENERAL MOTORS				
T14 (1936-37)	3/32–1/32	1½	1¾	7¼
T16 (1936-37); T16H (1936)	1/4–1/8	1½	½	7¼
T18, T18H, T46, T61, T61H (1936-37)	1/16–1/4	1	1½	8
T23, T23H, T33, T33H (1936-37-38)	1/16–1/4	1	1½	8
F16, F16H, T16H, F23, F23H (1937-38)	1/16–1/4	1	1½	8
F18, F18H, F33, F33H, F46, F61, F61H (1937)	1/16–1/4	1	1½	8

SPECIFICATIONS

T—Toe-Out

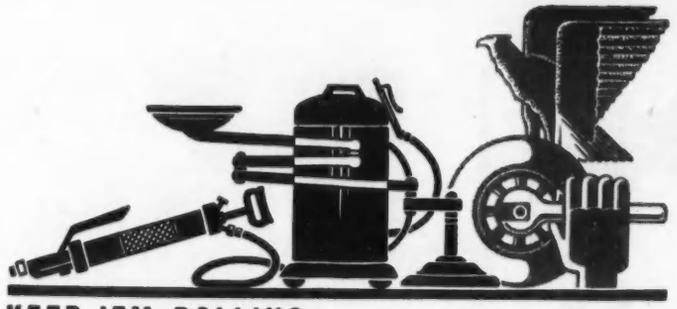


KEEP 'EM ROLLING

TRUCK MAKES AND MODELS	TOE-IN (In inches unless otherwise shown)	CAMBER (In degrees	CASTER (In degrees)	KING PIN SLANT (In degrees)
GENERAL MOTORS—Cont.				
T14, T145, T15, T155 (1938)	3/64–7/32	1½	2¾	7¼
T16 (1938)	1/16–1/4	1½	2¾	7¼
T18, T18H (1938)	1/16–1/4	1	2	8
F18, F18H (1938)	1/16–1/4	1	1	8
F33, F33H (1938); F46, F61H (1938)	1/16–1/4	1	½	8
T46, T61, T61H (1938)	1/16–1/4	1	1⅔	8
AC-500, AC-550, AC-600, AC-650 (1939-42)	1/16–1/4	1	½	8
AF-500, AF-550 (1939-42); AF-600, AF-650 (1939-41)	1/16–1/4	1	½	8
AC-700, AC-800, AC-850 (1939-42)	1/16–1/4	1	¾	8
AF-700, AF-800, AF-850 (1939-42)	1/16–1/4	1	¾	8
AC-100, AC-150 (1940)	3/64–7/32	1½	2¾	7¼
AC-250, AF-240 (1940)	3/64–7/32	1½	2½	7¼
AC-300 (1940)	3/64–7/32	1½	2¾	7¼
AC-350 (1940)	1/16–1/4	1	¾	8
AF-300, AF-310, AF-350, AF-400, AC-400 (1940)	1/16–1/4	1	1	8
AC-450, AF-450 (1940)	1/16–1/4	1	½	8
AF-240 (1941-42)	3/64–7/32	1½	1¼	7¼
CC-100 (1941-42)	3/64–7/32	1½	3	7¼
CC-150, CC-250 (1941-42)	3/64–7/32	1½	2¾	7¼
CC-260, CC-300 (1941-42)	3/64–1/4	1½	3	7¼
CC-350, CC-400 (1941-42)	1/16–1/4	1	1½	8
CF-300, CF-350, CF-400 (1941-42)	1/16–1/4	1	1	8
CC-450, CF-450 (1941-42)	1/16–1/4	1	½	8
AC-520, AC-620, AF-520, AY-700, AY-800, AY-850 (1942)	1/16–1/4	1	½	8
AC-720, AC-750, AC-770 (1942)	1/16–1/4	1¼	¾	8
AF-600, AF-620, AF-650 (1942)	1/16–1/4	1¼	½	8
ACX-870, ACX-890, AF-720, AF-750 (1942)	1/16–1/4	1	¾	8
GRAMM				
71, 76, 86, 96, D71, D76, D86, D96 (1940-41)	1/8	1	2	8
15, 25, 30, 40, 45 DJX40, 21, 31 (1936-41)	1/8	1	1¾	9
50, 55, 70, 75, 85, DJX55, DJX70, DJX75, DJX85 (1936-39); 56, D56 (1940-41)	1/8	1	2	8
11 (1940-41)	1/8	1½	2	7
41, 46, D46 (1940-41)	1/8	1	1¾	8
HUG				
23, 42, 23W, 42W CB8P	1/16–1/8	2	1	7½
43, 70, 85W, 87, 87W, 98, 99, 99S, 15W, 19W, 83W	1/16–1/8	2	1	0
15, 19, CB6P, All wheel drives	1/16–1/8	2	1	8½
INDIANA				
47DR, 43DR, 19DR, 17DR, 17ADR, 17, 17A	0–1/16	2	1½	0
95DR, 95, 95W75, 95SBT151, 14B, 16, 85	0–1/8	1	1½	8
17ASW151, 17SW251, 17SBT251	0–1/8	1	1½	0
84, 86, 87	0–1/8	1½	1½	7
INTERNATIONAL				
C1, C5, C15	1/8	2	2	7½
M2, C10, C20, M3	1/8	1	2	8
A1, A2, B2, A4, C50, A5, A6, C55, C60	1/8	1	2½	8
B3, C30, B4	1/8	1	1	8
C35, CS35, C40	1/8	1	1¼	8
W1, W2	1/8	1	0	8
A7, A8	1/8	1	½	8
D2, D5, D15, D2M	1/16–1/8	2	1–2	7½
D30, DS30, D30B, DS30B, D15M, D35, DS35, D35B, DS535B, D40, DS40, D40B, D186T, DS186T, D216T, DS216T, D300, DS300	1/16–1/4	1	2–3	8
D50, DR50, DS50, D60, DR60, DR70, D246T, DR246T, DS246T, D246F, DR346T, D346F, DR426F, D500, DR500, DS500, DR700	1/8–1/8	1	½–2	8
AR626F	1/16–1/8	1	0–1	8
K1, K2, K3 (1941-42)	1/8–1/8	2	2–3	7½
K4, KS4, K5, KS5 (1941-42)	1/16–1/8	1	2–3	8
K5-COE, KS5-COE, K6, KS6, K-6-T, KS-6-T, K-6-F, K7, KS7 (1941-42)	1/16–1/8	1	2–3	4
K7-COE, KS-7-COE (1941-42)	1/16–1/8	1	1½–1¾	4
K8, KS-8, KR8, K-8-T, KS-8-T, KR-8-T, K-8-F, K-8-COE, KS-8-COE, KR-8-COE, K-10, KR-10, KS-10, KR-11, KS-11, KR-11-T, K-11-F, KR-11-COE, KS-11-COE, KR-12-F (1941-42)	1/16–1/8	1	1½–1¾	4
KENWORTH				
513, 514, F209 (1936-37)	1/8–3/32	0	5	0
513, 514 (1938); 539, 540, 541, 542 (1938-42); 552 (1941-42)	1/8–3/16	0	4½–7	0
All others (1936-42)	1/8–1/4	1	1	8
LA FRANCE-REPUBLIC				
All models	1/8–3/16	1	1½–2	8
MARMON-HERRINGTON				
All Ford 1½-ton models (1936-41)	0–1/8	0	1½	0
All LD models (1936-41)	1/16–1/8	0	1½	8¼
All other models	0–1/8	0	4	0
OSHKOSH				
JCB, JD, W-100, W-200	1/8–3/16	1½	1	8½
WLX, WLD, B3S, B3D, C3S, C3D, R3S, FC35, FB35, FS, FC, FB	1/8–1/4	1½	3½	0
W-2300, W-300, W-400, W-500, W-600, W-700	1/8–1/4	1	1	3
W-900, BG3, GD	1/8–1/4	1½	1½	6
W-800	1/8–1/4	1½	1	6
REO				
1A4, 1B4, 1B4R, 1B4Y, 1C4, 1D4, 1D4R, 1D4Y, 1D4M, 2B4, 2B4R, 2D4, 2D4R, 2L4, 2L4C, 2LM, 1L5 (1935)	1/8–1/4	1½	¾	8½
2L4H, 21MH, 2H, 2HR, 2J, 2JR, 2K, 2KR, 3H, 3HR, 3J, 3JR, 3K, 3KR, 3M, 3MR, 3L8, 3L8, 3LC8 (1935)	1/8–1/4	1	1⅓	8½
4H, 4WH, 4J, 4WJ, 4K, 4WK, 4M, 4WM (1935)	1/8–1/4	1	1¼	8½
S4P (1935)	0–1/8	1½	3½	8

TRUCK MAKES AND MODELS	TOE-IN (In inches unless otherwise shown)	CAMBER (In degrees	CASTER (In degrees)	KING PIN SLANT (In degrees)
REO—Cont.				
6AP (1936)	0–1/8	1½	2½	8
1A4, 1A4H, 1CA, 1C4H, 1B4, 1B4H, 1D4, 1D4H, 2D4, 2B4, 2LC4, 2H5, 2J5 (1936)	1/8–1/4	1½	¾	8½
2D4M, 2DM4H (1936)	1/8–1/4	1	¾	8½
3H5, 3J5, 3K5 (1936)	1/8–1/4	1	1½	8½
3HR5, 3JR5, 3KR5, 4J5, 4K5 (1936)	1/8–1/4	1	1¼	8½
450, 650 (1937)	0–1/8	1½	2	8
475, 675 (1937)	0–1/8	1½	2	7
3P7 (1937)	1/8–1/4	1	½	8½
1A4, 1A4H, 1C4, 1C4H, 1B4, 1B4H, 1D4, 1D4H, 2B4, 2D4, 1L5, 2L4, 2L4H (1937-38)	1/8–1/4	1½	¾	8½
2H5, 2J5 (1937-38)	1/8–1/4	1	¾	8½
3H5, 3J5, 3K5, 3HR5, 3JR5, 3KR5 (1937-38)	1/8–1/4	1	1½	8½
4H5, 4J5, 4K5, 36H, 2L7M, 2L7MH, 3L6H (1937-38)	1/8–1/4	1	1¼	8½
1B7M, 2B7M (1938)	1/8–1/4	1	1	8½
19, 20, 21, 22, 23 (1940)	0–1/8	½–1	¾–1	8
19, 20, 21, 22, 23, 4D19, 6D19, D20, OSL-41, NWL-41 (1941-42); 23H, 25, 27 (1942)	0–1/8	1	¾–1	8
STERLING All models	1/8–3/16	1	1½–2	8
STEWART 41H, 46H, 47H (1935-36)	3/32–1/16	1	0	9
18XS, 48-8, 58X (1935-36)	3/32–1/16	2	2½N	7½
18XS, 32X, 48-8, 58X (1935-36)	3/32–1/16	2	1½N	7½
27XS, 31X (1935)	3/32–1/16	1	½	8
29XS, 32X (1935)	3/32–1/16	2	1½N	7½
38-8, 38-6 (1935-36)	3/32–1/16	1	1½N	8
40H, 60H (1935-36)	3/32–1/16	1½	1½	7
46HB, 48HB, 47HB, 49HB (1935-36)	3/32–1/16	2	½N	7½
48H, 50H (1935-36)	3/32–1/16	2	1¾N	7½
49H (1935-36)	3/32–1/16	2	0	7½
40HC, 60HC (1937)	0	1½	1¼–1½	7
61H, 47A, D10A, 47A (1937-38)	0	1	1¼–1½	8½
45A (1937-38); 45AL (1938)	0	1	1 –1¼	9
49A, 50A, 51A, D30A (1937-38)	0	2	1½–1¾	8½
58A, 59A (1937-38)	0	2	1¾–2	8½
36-6, 31X (1937-38); 38A (1940-42)	0	2	1 –1¼	8
47AB, 49AB, 51AB	0	1	1¼–2	8½
49A (1940-42)	0	2	1½–1¾	9
58A, 59A (1940-42)	0	2	1¾–2	8
STUDEBAKER				
S20, S30 (Before serials 3401715 and 3425745) S40, S50, S60, S41, S51, S61, S120, S130, S140, S150, S6, S8 (1931-33)	1/16–1/8	0–1	¼–¾	8
S20, S30 (After serials 3401715 and 3425745) S21, S31, S2, S3 (1931-33)	1/16–1/8	0–1	¼–¾	9
1T2, 2T2 (1935-36)	1/16–1/8	1	¼–1	9
1T6, 1W7, 1W8, 2W6, 2W7, 2W8 (1935-36)	1/16–1/8	1	¼–1	8
J5 (1937)	1/16–1/8	1–1½	1 –1½	9½
J15, J15M (1937); K10, K15, K15B (1938-40)	1/16–1/8	1	½–1	9
J20, J25, J30 (1937); K20, K25, K30 (1938-40)	1/16–1/8	1	½–1¼	8
J20M, J20MB, J25M, J25MB, J30M (1937)	1/16–1/8	1	½–1	8
K5 (1938); L5 (1939)	1/16–1/8	¼–¾	0 –1½	5½
K15M, K20M, K20MB, K25M, K25MB, K30M (1938)	1/16–1/8	1	0 –1½	8
Coupe Express (1941-42)	1/16–1/8	1	2	7½
All Other Models (1941-42)	1/16–1/8	1	1¼	8
WALTER				
FN, FM, FKM, FCK, FC, FB, FBR, FXB, FXR	N1/16	1½	5	2
WHITE				
15, 15B	All White Models (Balloon Tires) — 1/16–1/8	1½	1½	0
160, 161, 162, 60, 60K, 601, 602		1	3¾	8½
20, 20A, 20D		1½	3	0
210, 211, 212, 611, 612, 612K, 613		1	3½	8½
40, 40A, 40D, 45, 45A, 45D, 52, 52D, 52T, 55, 50B (Elliott Type Axle)		1½	0	0
51AS, 58S, 620K, 621K, 63, 63D, 64, 640, 50B, 51A (Reverse Elliott Type Axle)		1	3½	8½
51, 51A (Elliott Type Axle)		1½	2¾	0
53, 701, 702, 784, 786, 788		1	1½	8½
54, 59, 54A, 59A, 691, 712, 713		1	2¾	8½
56		1½	1½	0
618, 618K, 620, 621, 630K, 631, 631K, 640K, 641K, 642, 643, 58SS		1	3½	8½
57		1½	2½	0
58, 685, 706M		1	2½	8½
65, 65A		1	1¾	8½
684, 686		1	1	8½
730, 731		1	2½–3½	8½
718, 750, 750T		1	2	8½
703, 704, 705, 704K, 706, 708, 709, 710, 720, 722, 804, 805, 809, 810, 784, 786, 788, 798, 720T		1	3	8½
706M, 7786, 7788, 812, 818, 850		1	3½	8½
700, 800, 800M, 802, 804, 1010, 1012		1	1½	8
820, 822		1	3½	8
White Horse (1940)		1	3¼	9
WA14, WA16, WA18, WA20, WA34		1	2½	8
WA22, WA26, WA114, WA118, WA120, WA122, WA126, WA134, 782		1	2½	8½
White Horse (1941)		1	1	9
WILLYS				
C101, T101, C113, C131, C157, 77 (1929-37)	1/8	2	1 –2	7½
37, 38, 48, 440, 441, 440P, 441P, 442, 442P (1937-42)	3/32	2	3	7½

LUBRICATION SPECIFICATIONS



KEEP 'EM ROLLING

ABBREVIATIONS

*—Fibre Grease for pin and bushing type; 160 for needle bearing type
**—Use 90EP below 30°; 140EP above 30° on all 2-speed axles
†—10% kerosene in extremely low temperatures
††—Use 40 for high speed above 90°
§—Use 50 for high speed above 80°
#—Use 40 in 672 and 707 Diesel engines
‡—Use 90EP with dual performance axles. Do not use EP in double reduction axles
a—Double reduction and 2-speed axles 110EP
b—Double reduction and 2-speed axles 90EP (140EP at temperatures above 100°)
A—Also front axle
C—Use 90EP in two-speed axles on Models 147, 154, 156
d—If equipped with steering column shift use 90
e—If equipped with steering column shift use 80
f—Under severe conditions use 140
EP—Extreme pressure
FG—Fibre Grease
H—Heavy duty
Hyp—Hypoid lubricant
Kero—Kerosene
M—Mild
N—Normal duty
(S)—Summer
SS—Sodium soap
(W)—Winter

TRUCK MAKE AND MODEL	ENGINE Viscosity and Temperature Range			TRANSMISSION Summer	TRANSMISSION Winter	REAR AXLE Summer	REAR AXLE Winter	STEERING GEAR Summer	STEERING GEAR Winter	UNIVERSAL JOINT
AUTOCAR—All Models (1935-39)	(S)40	(W)30		160	110	160	110	160	110	160
All Models (1940-42)	(S)30#	(W)20		140	90	140	90	140	90	140-90
BANTAM 60	(S)30	(W)20		160	90	160	90			None
65	(S)30	(W)20		140	90	140	90			None
BROCKWAY 78, 83, 88, 92, 94, 112, 128, 146, 147 (1935-42)	N30 above 32°	H40 above 32°	30 below 32°	160	110	160(C)	110(C)	160	110	160
152, 153, 154, 156, 162, 166, 170X, 175X, 195X, 220X, 240X, 260X (1934-42)	N40 above 32°	H40 or 50 above 32°	30 below 32°	160	110	160(C)	110(C)	160	110	160
CHEVROLET—All Models (1935)	20 above 75°	10W@-15° to 32°	90% 10W, 10%	160	90†	160	90†			160-90†
	20W@32° to 75°		Kero below -15°							
All Models (1936-37)	30 above 50°	20W@10° to 80°	90% 10W, 10%	160	90†	160	90†			160-90†
	20@30° to 80°	10W@10° to 45°	Kero below 20°							
All Models (1938)	30 above 50°	20W@10° to 30°	90% 10W, 10%	90	90†	90	90			90
	20@30° to 50°	10W@10° to 10°	Kero below -10°			¾-Ton 90EP	¾-Ton 90EP			
All Models (1939)	20 or 20W	20W@10° to 30°	90% 10W, 10%	90	90	90	90			90
	above 32°	10W@ -10° to 10°	Kero below -10°			¾-Ton 90EP	¾-Ton 90EP			
All Models (1940-42)	20 or 20W	20W@10° to 30°	90% 10W, 10%	90	90	90Hyp	90Hyp			90
	above 32°	10W@ -10° to 10°	Kero below -10°							
CORBITT—All Models (1934-38)	(S)40	(W)30		110	90	160	110	160	160	160
All Models (1939-42)	(S)40	(W)30		160	90	160	90	160	160	160
DIAMOND T—211, 211A, 220, 226, 227, 242, 243, 262, 311B, 311C, 312, 351B, 351C, 352, 411B, 412B, 511B, 512B (1934-35)	40 above 40°	30 below 40°		160	90	**160	** 90	160	160	160
311DR, 351DR, 411DR, 412DR, 511DR, 512DR (1935-36)	40 above 40°	30 below 40°		160	90	**110EP	**110EP	160	160	160
228, 412B, 512B, 80, 212A, 212B, 221, 244, 313, 320, 353, 360 (1936-37)	40 above 40°	30 below 40°		160	90	**160	** 90	160	160	160
412DR, 512DR (1936-37)	40 above 40°	30 below 40°		160	90	**110EP	**110EP	160	160	160
All Models (1938-39)	40 above 40°	30 below 40°		160	90	160EPa	90EPa	160EP	110EP	160EP
All Models (1940)	40 above 40°	30 below 40°		140	90	140EPb	90EPb	140EP	140EP	140EP
805, 805C, 806, 806C, 900 (1941-42)	40 above 40°	30 below 40°		140	90	140EPb	140EPb	140EP	140EP	140
All Other Models (1941-42)	40 above 40°	30 below 40°		140	90	140EPb	90EPb	140EP	140EP	140
DODGE—LC				140	90	140	90	90	90	FG
LE, LF, K-50V, K-60V, ME, MF, ML, MK, RE, RF, RL, RK, TE, TF, TL, TK, VL, VK				140EP	90EP	140EP	90EP	90	90	140
LG, LH, MG, MH, RG, RH				140EP	90EP	140EP	90EP	90	90	140
MC, RC, TC, TD-15, VC, VD, WC, WD	40 above 90°	20W@10° to 32°	90% 10W, 10%	140	90	90Hyp	90Hyp	90	90	FG
MD, RD, TD-20, TD-21	30@32° to 90°	10W@-10° to 10°	Kero below -10°	140	90	140EP	90EP	90	90	FG
TG, TH, VG, VH, VF, VM, WF, WFM, WG, WH, WGM, WHM				140EP	90EP	90Hyp	90Hyp	90	90	140
WL, WK, WLD, WKD				140EP	90EP	90EP	90EP	90	90	140
FEDERAL—15, 18, 20, 25, T10B, T10W (1935)	(S)30	(W)30		160	160	160	160			160
28, 29, 30, 40, 40DR, 50, C7, C8, X8, X8R (1935)	(S)30	(W)30		200	200	160	160			160
All (1936-37)	(S)50	(M)30	(W)20	160	160	160***	160***			160
9 (1938); 7 (1940)	N30, H40@50° to 110°	N20, H30@15° to 50°	N10, H20@ -20° to 15°	160	90	160	90			160
C7, C8, 40, 50, 40F, 50F, 62, 63, 65, 66 (1939)	N40, H50@50° to 110°	N30, H40@15° to 50°	20@ -20° to 15°	160	90	160	90			160
40, 50, 50H, 62, 63, 66, 62, 65, 66 (1940-42)	N40, H50@50° to 110°	N30, H40@-15° to 50°	N20, H30@ -20° to 15°	160	90	160	90			160
8, 10, 11, 11K, 12, 12K, 14, 14K, 15, 15K, 16, 17, 18, 18K, 20, 20K, 25, 25K, 29, 29H, 29K, 35, 45, 55, 75, 75K, 76, 77, 80, 80K, 85, 85K, 89, 89H, 89K, 90, 92, 94, 94H (1939-42)	N40, H50@50° to 110°	30@15° to 50°	20@20° to 15°	160	90	160	90			160
FORD—All (1932-39)	50 above 90°	30@20° to 65°	20W above 10°	140	90 or 110	140EP	90EP or 110EP	160	90 or 110	
	40@30° to 110°		10W above -10°							
All (1939-40)	40 above 90°	30 above 32°	90% 10W, 10%	140(d)	90(e)	140EP(M)	90EP(M)	90	90	SS
All (1941-42)	40 above 90°	30 above 32°	Kero below -10°	140(d)	90(e)	140EP(M)	90EP(M)	90	90	140
FWD—HS, T26, HA, T30	(S)40	(MW)30	(W)20W	140	90	140EP	90EP	140EP	90EP	160
All Others (1936-42)	(S)50	(MW)40	(W)30	140	90	140EP	90EP	140EP	90EP	160
GENERAL MOTORS—T16, T18, T33, T33L, T43T, T23 (1934-35)	40 above 90°	30@32° to 90°	20W@32° to 0°	160	90 below 15° 110@ 15° to 35°	160 above 35°	110@ 15° to 35° 90 below 15°	160	160	110
T46 (1934-35)	50 above 90°	40@32° to 90°	10W below 0°							160
T70, T76T, T76H, T75, T75T, T73, T72H (1934-36)	40 above 35°	30@32° to 35°								

GENERAL MOTORS—T16, T16, T35, T35L, T45T, T23 (1934-35)										
T46 (1934-35)	50 above 90°	30@32° to 90°	10W below 0°	160	15° to 35°	above 35°	15° to 35° 90 below 15°	160	160	160
T78, T78T, T75H, T75, T75T, T73, T73H (1934-36)	40 above 35°	30@32° to 35°								
T14, T16, T16H, F16, F16H, T18, T18H, F18, F18H, T23, T23H, F23, F23H, T33, T33H, F33, F33H, T46, F46 (1936-37)	40 above 80°	30@ 40° to 80°	20@30° to 70°	160 above 35°	90 below 15° 15° to 35°	160 above 35°	110@ 15° to 35° 90 below 15°	160 and 3%SS	110 and 3%SS	Same as Rear Axle (S)140 or 160 (W)190 or 110
T46, F46, T61, F61, T61H, F61H (1936-37)	50 above 80°	40@50° to 80°	10W@10° to 45°	90	90	90	90‡	140 or 160 and 3%SS	90 or 110 and 3%SS	
T14, T145, T15 (1938)	20@30° to 110°	20W@10° to 70°				140 or 160‡				
T155, T16, T16H, F16, F16H (1938)	20@30° to 110°	20W@10° to 70°								
T18, T18H, F18, F18H, T23, T23H, F23, F23H, T33, T33H, F33, F33H, T46, F46 (1938)	30@40° to 110°††	20@40° to 70°	10W@-10° to 45°	140 or 160						
T61, T61H, F61, F61H (1938)	40@50° to 110°§	20W@10° to 70°	90% 10W, 10% Kero below -10°							
AC-100, AC-150 (1939); AC-250, AC-300, AC-350, AC-400, AC-450, AF-200, AF-240, AF-241, AF-300, AF-310, AF-350, AF-400, AF-450 (1939-40)	H30@40° to 110° N20@32° to 110°	20W@10° to 70°		90(f)	90	140‡	90‡	140 and 3%SS	90 and 3%SS	Same as Steering Gear
AC-100, AC-150 (1940); CC-100, CC-150 (1941-42)	20@32° to 110°	20W@10° to 70°		90(f)	90	90-Hyp	90-Hyp			
CC-250, CC-260, CC-300, CC-350, CC-400, CC-450, CF-350, CF-400, CF-450 (1941-42)	H30@40° to 110° N20@32° to 110°	20W@10° to 70°		90(f)	90	90(f)‡	90‡			
AC-500, AC-550, AC-600, AC-650, AC-700, AC-800, AC-850, AF-500, AF-550, AF-600, AF-650, AF-700, AF-800, AF-850 (1939-42)	H30@40° to 110° N20@32° to 110°	20W@10° to 70°		140	90	140‡	90‡			
GRAMM—All Models (1935-42)	30 to 40 above; 32°	20 to 30@10° to 32°	10 to 20 below 10°	160	90	160	90	160	90	160
HUG—83W, 85W, D92U, D98, D99, D99S, 50-6	40@50° to 110°	30@15° to 50°	20W@ -20° to 16°	140	90	140	90	160	90	160
87W, 92U, 98, 44-4, 45-4, 99, 99S, 46-4	50@50° to 110°	40@15° to 50°	30@ -20° to 15°	140	90	140	90	160	90	160
INDIANA—All Models (1934-40)	∮30 above 32°	20W above 10°	10W above -10°	110	90	110EP	90EP	110	110	160
INTERNATIONAL—All Models	(S)N30 or 40 (S)H40 or 50	30@32° to 90° 20W@10° to 32°	10W@ -10° to 10°	140	90	140**	90**	140	90	140
KENWORTH—146, 146SW, 146SBT (1936-37)	(S)30	(W)20		140	90	140	90	140	140	140
241A, D241C, 346C (1936-37)	(S)50	(W)30		140	90	140	90	140	140	140
All Others (1936-37)	(S)40	(S)30		140	90	140	90	140	140	140
H30 (1938)	50 above 32°	30@0° to 32°		140	90	140	90	140	90	140
505 to 512, 514, 515, 516, 519, 520 to 524, 543 to 548, 549, 550, 552 (1938-42)	50 above 90°	40@60° to 90°	30@10° to 60° 20@ -10° to 10°	140	90	140	90	140	90	140
513, 536, 537, 538, 621, 622 (1938-42)	40 above 75°	30@32° to 75°	20@ -32°	140	90	140	90	140	90	140
525, 526, 527, 528, 539, 540, 541, 542 (1938-42)	40 above 50°	30@5° to 50°	20@ -0° to 5°	140	90	140	90	140	90	140
547 (1938-42)	50 above 30°	30@ -0° to 32°		140	90	140	90	140	90	140
551, 553, 554, 555, 556 (1938-42)	50 above 75°	40@32° to 75°	30@ -30°	140	90	140	90	140	90	140
LA FRANCE REPUBLIC—C3, D4, E4 (1934-35)	40@32° to 90°	30@0° to 32°	20W@15° to0°	140	90	140	90	140	140	140
F4, H6, K1, M4, MT4 (1934-38)	50@32° to 90°	30@0° to 32°	20W@15° to 0°	140	90	140	90	140	140	140
EH5B, EH5D, EH6B, EH6D (gasoline engines)	40@50° to 110°	30@15° to 50°	20W@ -20° to 15°	140	90	140	90	140	140	140
FH5B, FH5D, HH7, KH2, MH5 (gasoline engines)	50@50° to 110°	40@15° to 50°	30@ -12° to 15°	140	90	140	90	140	140	140
MARMON-HERRINGTON—Ford Conversions	(S)40	(M)30	(W)20 (10 below 10°)	140	90	140A	90A	90EP	90EP	140
All Other Models	(S)50	(M)40	(W)30	140	90	140A	90A	140	90	140
OSHKOSH—All Models (1936-42)	40 above 32°	30@0° to 32°	20 below 0°	140	90	250	140			140
REO—All Models (1934-39)	30 above 18°	20W@0° to 18°	10W below 0°	140	90	140	90			140
All Gasoline Models (1940-1942)	20 above 32°	10W below 32°		140	90	140	90			
All Diesel Models (1941-42)	40 above 50°	20@0° to 50°	20 below 0°	140	90	140	90			140
STERLING—FB50 De Luxe, FB60 De Luxe, FB70 De Luxe (1934-38)	40@32° to 90°	30@0° to 32°	20W@15° to 0°	140	90	140	90	140	140	140
FB80, FD90, FC90 (1934-38)	50@32° to 90°	30@0° to 32°	20W@0° to 15°	140	90	140	90	90	90	140
FD97, FD115, FC100, FC135, HC140, HC170 (1934-38)	50@32° to 90°	30@0° to 32°	20W@0° to 15°	140	90	140	90	140	140	140
FBT130 (1934-35)	40@32° to 90°	30@0° to 32°	20W@0° to 15°	140	90	140	90	90	90	140
FBT152, FDT180, FCT180, FDT200, FCT200, HCS210 (1934-38)	50@32° to 90°	30@0° to 32°	20W@0° to 15°	140	90	140	90	140	140	140
MB75, MD75, MS75, MB85 MD85 (1939-42) (gasoline)	40@50° to 110°	30@15° to 50°	20W@ -20° to 15°	140	90	140	90	110EP	110EP	140
MB90, MD90, HC175, HC200, HC185, HC250, HCS255, HCS285, HCS300 (1939-42) (gas.)	50@50° to 110°	40@15° to 50°	30@20° to 15°	140	90	140	90	110EP	110EP	140
JB90, JD90, HD105, HD110, HD115, HD135, HD137, HD145, HD165, HD175, HC105, HC115, JC137, JC145, HC145, HC147, HC156, HC165, HBT128, HWS128, HDS128, JDS160, JWS160, HDS235, HWS235, HCS225 (1939-42) (gasoline)	50@50° to 110°	40@15° to 50°	30@20° to 15°	140	90	140	90	140	140	140
STEWART—49A	(S)30	(W)20		160	90	160	90	160	90	160
58A, 59A	(S)40	(W)30		160	110	160	110	160	110	160
38A	(S)50	(W)30		160	110	160	110	160	110	160
STUDEBAKER—T2, T4, T6, T8 (1934); IT200, IT600 (1935)	30 above 45°††	20@10° to 45°	10 below 10°	140	90	140	90			
W8 (1934); IW700, IW800 (1935)	50 above 32°	40@0° to 32°	30 below 0°	140	90	140	90			
2T2, 2M2, 2TB2 (1936)	30 above 45°††	20@10° to 45°	10 below 10°	140 above 32°	90 below 32°	140 above 32°	90 below 32°			
2W6, 2M6, 2NB6, 247 (1936)	40 above 32°	30@0° to 23°	20 below 10°	140 above 32°	90 below 32°	140 above 32°	90 below 32°			
2WB (1936)	50 above 32°	40@0° to 32°	20 below 0°	140 above 32°	90 below 32°	140 above 32°	90 below 32°			
J5 (1937)	30@45° to 90°††	20@0° to 45°	10 below 0°	90	90	EP	EP			
J15, J15B, J15M, K15, K15B, K15M (1937-40)	30 above 45°††	20@0° to 45°	10 below 0°	140 above 32°	90 below 32°	140 above 32°	90 below 32°			
J20, J20M, J20MB, J25, J25M, J25MB, K20, K20M, K20MB, K25, K25M, K25MB (1937-40)	40 above 32°	30@0° to 32°	20 below 0°	140 above 32°	90 below 32°	140 above 32°	90 below 32°			
J30, J30M, K30, K30M (1937-40)	50 above 32°	40@0° to 32°	30 below 0°	140 above 32°	90 below 32°	140 above 32°	90 below 32°			
K5 (1938); L5 (1939)	30 above 32°	20@0° to 32°	10 below -10°	90	90	EP	EP			
K10 (1938-40)	30 above 45°	20@0° to 45°	10 below 0°	140 above 32°	90 below 32°	140 above 32°	90 below 32°			
Coupe-Express (1941-42)	40 above 90°	20@10° to 32°	10 below 10°	140 above 32°	90 below 32°	90EP	90EP			
All Other Models (1941-42)	30@32° to 90°	20@10° to 32°	10 below 10°	140 above 32°	90 below 32°	140 above 32°	90 below 32°			
WALTER—All Models	(S)50	(W)30		140	90	140	90	140	90	
WHITE—All Models	40 above 90°	30 above 32°	20 above 10° 10 above -10°	140	90	140	90			140
WILLYS—77 (1933-36)	30@40° to 80°	20@15° to 40°	10@ -15° to 15°	190 to 210	150 to 170	190 to 210	150 to 170	190 to 210	150 to 170	FG
77, 38, 46 (1937-39)	30 or 20W above 32°	10W above -10°	90% 10W, 10% Kero below -10°	90	90	90	90	190 to 210	150 to 170	FG
440, 441, 441P, 442, 442P	30 above 90° 20 above 32°	20W-10° to 32° 10W-10° to 10°		90	90	90	90			

GASOLINE ENGINE

ENGINE MAKE AND MODEL	Number of Cylinders, Bore and Stroke (In.)	MAX. BRAKE H.P. at R.P.M.		Piston Displacement (Cu. In.)	Compression Ratio	TORQUE	VALVES						Front End Drive—Type	Piston Material	No. of Rings per Piston	Crankpin, Diameter and Length (In.)	Oil Pressure to—	CARBURETOR		Engine Weight without Carburetor or Ignition (Lb.)
		With Bare Engine	With Standard Accessories			Maximum Torque at R.P.M. (Lb. Ft.)	Arrangement	Max. Head Diam. (In.) Intake	Max. Head Diam. (In.) Exhaust	Stem Diam. (In.) Intake	Stem Diam. (In.) Exhaust	Seats Angle (Deg.)	Seats Inserts Used?						Make	Size	
AUTOCAR																				
377	6-4x5	119-2500	112-2800	377.0	5.75	280-1400 (BE)	L	1.90	1.78	.437	.437	45	E	HG	Al	4	2.37x1.44	abcde	Zen	1¼	1165
447	6-4¼x5¼	133-2500	122-2500	447.0	5.75	351-1100 (BE)	L	2.06	1.93	.437	.437	45	E	HG	Al	4	2.50x1.58	abcde	Str	1¼	1320
501	6-4½x5¼	145-2500	134-2500	501.0	5.75	395-1100 (BE)	L	2.06	1.93	.437	.437	45	E	HG	Al	4	2.50x1.58	abcde	1¾	1¾	1330
BUDA																				
HP-205	4-3 11/16x4½	51-2400	43-2400	205.0	4.76	112-1200 (EA)	L	1.65	1.53	.372	.372	45	N	HG	CI	4	2.12x1.62	abcde	Zen	1¼	590
HP-217	4-3 11/16x4¾	55-2400	47-2400	217.0	5.50	123-1200 (EA)	L	1.65	1.53	.372	.372	45	N	HG	CI	4	2.12x1.62	abcde	Zen	1¼	590
HP-234	4-3 11/16x5⅛	59-2400	50-2400	234.0	5.83	133-1200 (EA)	L	1.65	1.53	.372	.372	45	N	HG	CI	4	2.12x1.62	abcde	Str	1¼	770
YR-425	4-4¼x6	57-1400*	48-1400	425.3	3.80	226-800 (EA)	L	2.37	2.37	.434	.434	45	E	HG	CI	4	2.50x2.87	abcde	Zen	1½	1087
FR	4-5½x6½	78-1200	66-1200	618.0	4.60	350-600 (EA)	L	2.50	2.50	.434	.434	45	E	HG	CI	4	2.50x3.12	abcde	Zen	1½	1430
HP-260	6-3 11/16x4½	68-2800	58-2800	260.0	4.75	139-1100 (EA)	L	1.65	1.53	.372	.372	45	N	HG	CI	4	2.12x1.62	abcde	Zen	1½	825
HP-298	6-3¾x4½	77-2800	65-2800	298.0	4.75	161-1100 (EA)	L	1.65	1.53	.372	.372	45	N	HG	CI	4	2.12x1.62	abcde	Zen	1½	825
HP-326	6-3 11/16x4¾	78-2400	66-2400	326.0	5.40	188-1000 (EA)	L	1.65	1.53	.372	.372	45	N	HG	CI	4	2.12x1.62	abcde	Zen	1½	885
HP-351	6-3 11/16x5½	84-2400	71-2400	351.0	5.83	201-1000 (AE)	L	1.65	1.53	.372	.372	45	N	HG	CI	4	2.12x1.62	abcde	Zen	1½	905
K-393	6-4 3/16x4¾	101-2400	86-2400	393.0	4.80	216-1100 (EA)	L	1.90	1.78	.372	.372	45	N	HG	CI	4	2.37x1.75	abcde	Zen	1¾	905
K-428	6-4⅜x4¾	107-2400	91-2400	428.0	5.33	240-1100 (EA)	L	1.90	1.78	.372	.372	45	N	HG	Al	4	2.37x1.75	abcde	Zen	1¾	905
L-525	6-4½x5½	110-2400	94-2400	525.0	4.75	287-800 (EA)	L	1.90	1.78	.372	.372	45	E	HG	CI	4	2.37x1.75	abcde	Zen	1¾	950
LO-525	6-4½x5½	135-2400	115-2400	525.0	5.00	330-1100 (EA)	I	1.96	1.68	.372	.372	30	E	HG	Al	5	2.37x1.75	abcdeg	Zen	1¾	1195
GF-638	6-4¾x6	134-2000	114-2000	638.0	4.75	347-1100 (EA)	L	2.50	2.37	.434	.434	30	E	HG	CI	4	3.00x2.25	abcde	Zen	1¾	1525
M-766	6-5x6½	155-1800	132-1800	765.8	5.00	425-1000 (EA)	I	2.39	2.14	.435	.435	30	E	HG	Al	5	3.24x2.12	abcdeg	Zen	1¾	2150
CHEVROLET																				
1942	6-3½x3¾	90-3300	83-3200	216.5	6.50	168-1100 (EA)	I	1.64	1.46	.341	.340	30	N	HG	CI	3	2.06x1.25	abcg	Car	1¼	.....
1942	6-3 5/16x3⅛	93-3100	85-3000	235.5	6.62	182-1000 (EA)	I	1.64	1.46	.341	.340	30	N	HG	CI	3	2.12x1.37	abcg	Car	1¼	.....
CONTINENTAL																				
F-6209	6-3 7/16x4⅝	71-3200	64-3100	209.5	5.75	155-1200	L	1.51	1.32	.341	.339	(h)	E	Ch	CT	4	1.93x1.31	abcet	.....	1¼	506
A-6244	6-3 7/16x4⅝	85-3000	.....	243.6	6.02	182-1200 (BE)	L	1.57	1.32	.372	.372	(k)	E	HG	Al	5	2.12x1.37	abcet	.....	1¼	548
M-6290	6-3⅝x4⅝	92-3000	.....	270.9	5.75	207-1200 (BE)	L	1.76	1.51	.404	.402	(h)	E	HG	CT	4	2.25x1.56	abcet	.....	1½	750
M-6290	6-3⅝x4⅝	99-3000	.....	289.9	5.70	225-1200 (BE)	L	1.76	1.51	.404	.402	(h)	E	HG	CT	4	2.25x1.56	abcet	.....	1½	780
M-6330	6-4x4⅝	107-2800	.....	329.8	5.50	258-1000 (BE)	L	1.76	1.51	.404	.402	(h)	E	HG	CT	4	2.25x1.56	abcet	.....	1½	770
B-6371	6-4 1/16x5⅛	109-2600	.....	370.9	5.74	230-1000 (BE)	L	1.89	1.64	.435	.432	(k)	E	HG	Al	5	2.50x1.69	abcet	.....	1¾	855
B-6405	6-4 1/16x4⅝	115-2600	.....	405.3	5.74	314-1000 (BE)	L	1.89	1.64	.435	.432	(k)	E	HG	Al	5	2.50x1.69	abcet	.....	1¾	870
21R	6-4⅜x4¾	133-2400	.....	428.4	4.63	323-1000 (BE)	I	2.06	1.87	.435	.433	30	E	Ch	Al	4	2.50x1.81	abcefg	.....	1¾	1318
22R	6-4½x5¼	141-2400	.....	501.0	4.50	375-1000 (BE)	I	2.06	1.87	.435	.433	30	E	Ch	Al	4	2.75x1.81	abcefg	.....	2	1430
DODGE																				
T-112, T-114	6-3¼x4⅝	95-3600	80-3400	217.7	6.80	172-1200 (BE)	L	1.53	1.40	.340	.340	45	E	Ch	.....	4	2.06x1.00	abce	Car	1½	500
T-116	6-3¼x4⅝	105-3600	85-3400	230.2	6.80	184-1300 (BE)	L	1.53	1.40	.340	.340	45	E	Ch	.....	4	2.06x1.00	abce	Str	1½	535
T-118, T-128	6-3 7/16x4¼	115-3800	95-3600	236.6	6.80	190-1500 (BE)	L	1.68	1.53	.340	.340	45	E	Ch	.....	4	2.12x1.09	abce	Car	1½	580
T-120, T-130	6-3 7/16x4½	120-3800	100-3600	250.6	6.80	200-1500 (BE)	L	1.68	1.53	.340	.340	45	E	Ch	.....	4	2.12x1.09	abce	Car	1½	600
T-124	6-3¾x5	110-3200	98-3200	331.3	5.85	240-800 (BE)	L	1.93	1.75	.371	.371	45	E	Ch	.....	4	2.31x1.43	abce	Str	1½	1050
FORD																				
40	4-3 1/16x3¾	.....	40-3200†	119.5	6.00	84-1600 (BE)	L	1.51	1.28	.311	.310	45	Bo	HG	CAS	4	2.10x1.12	abc	Own	.78	352
90HP	6-3.3x4.4	.....	90-3400†	225.8	6.70	180-1400 (BE)	L	1.65	1.51	.311	.310	45	Bo	HG	CAS	3	2.23x1.40	abc	Own	1.19	532
90	8-3 1/16x3¾	.....	90-3800†	221.0	(1)	(5) (BE)	L	1.51	1.51	.311	.310	45	Bo	HG	CAS	4	2.00x1.75	abc	Own	.94	547
100	8-3 1/16x3¾	.....	100-3800†	239.0	6.40	176-2000 (BE)	L	1.51	1.51	.311	.310	45	Bo	HG	CAS	4	2.14x1.75	abc	Own	.94	554
FRANKLIN																				
4CHO-150	4-3 15/16x3⅝	.....	43-3000	150.0	5.50	100-1200 (EA)	I	1.66	1.51	.375	.375	30	....	HG	Al	5	1.93x1.00	ace	Op	1¼	315
4CHO-176	4-4x3½	60-2500	55-2500	176.0	6.00	132-1600 (EA)	I	1.93	1.50	.375	.375	(h)	Bo	HG	Al	4	1.93x1.15	abeg	Zen	.....	.....
G. M. C.																				
228	6-3 1/16x3 13/16	95-3200	85-3000	228.0	6.75	178-1000 (EA)	I	1.64	1.47	.343	.343	30	E	HG	Al	4	2.31x1.23	abcdeg	Zen	1⅜	.....
248	6-3 13/16x3 13/16	100-3100	89-3000	248.5	6.75	195-1000 (EA)	I	1.64	1.47	.343	.343	30	E	HG	Al	4	2.31x1.23	abcdeg	Zen	1⅜	.....
270	6-3 13/16x4	104-3000	95-3000	270.0	6.75	216-1000 (EA)	I	1.64	1.47	.343	.343	30	E	HG	Al	4	2.31x1.23	abcdeg	Zen	1⅜	.....
278	6-3⅝x4½	100-2800	86-2800	278.6	6.00	213-1000 (EA)	I	1.81	1.56	.375	.375	45	E	HG	Al	4	2.37x1.34	abcdeg	Zen	1⅜	.....
308	6-3 11/16x4½	111-2800	97-2800	308.2	6.00	239-800 (EA)	I	1.81	1.46	.375	.375	45	E	HG	Al	4	2.37x1.34	abcdeg	Zen	1⅜	.....
361	6-4 1/16x4½	122-2800	106-2500	360.8	6.00	265-800 (EA)	I	1.94	1.72	.375	.375	(h)	E	HG	Al	4	2.62x1.47	abcdeg	Zen	1½	.....
426	6-4¼x5	145-2600	127-2400	425.6	6.00	322-1000 (EA)	I	1.94	1.72	.375	.375	(h)	E	HG	Al	4	2.62x1.47	abcdeg	Zen	1½	.....
451	6-4⅜x5	149-2600	130-2400	450.9	6.00	350-1000 (EA)	I	1.94	1.72	.375	.375	(h)	E	HG	Al	4	2.62x1.47	abcdeg	Zen	1¾	.....
477	6-4½x5	153-2600	135-2400	477.1	6.00	365-1000 (EA)	I	1.94	1.72	.375	.375	(h)	E	HG	Al	4	2.62x1.75	abcdeg	Zen	1¾	.....
529	6-4⅝x5¼	158-2500*	144-2300	529.2	5.50	387-1000 (EA)	I	2.12	1.94	.437	.437	30	E	HG	Al	4	2.62x1.72	abcdeg	Zen	2	.....
707	6-5x6	175-2200	160-2100	706.8	4.83	555-1000 (EA)	I	2.44	2.17	.437	.500	30	E	HG	Al	5	2.75x2.06	abcdeg	Str	2	.....
HERCULES																				
QXA-3, QXA-5	6-3½x4⅛	59-3000	50-3000	190.0	5.50	130-1000 (BE)	L	1.50	1.37	.310	.310	30	N	HG	CI	4	2.00x1.25	abe	Op	1¼	430
QXB-3, QXB-5	6-3½x4⅛	67-3500	57-3500	205.0	5.85	150-1000 (BE)	L	1.50	1.37	.310	.310	30	N	HG	CI	4	2.00x1.25	abe	Op	1¼	430

ABBREVIATIONS

*—Weight complete with ignition and carburetor
†—Rated with generator and water pump, but no fan or muffler

(1)—6.15 ratio for Cars, 5.87 for heavy duty truck engine
(2)—157 ft. lb. torque at 2200 for cars; 150 ft. lb. at 2000 for heavy duty truck engine
a—Main Bearings
Al—Aluminum Alloy
Ala—Aluminum Alloy, Anodized
Als—Aluminum Alloy with Steel Strut
b—Connecting Rods
BE—Bare Engine
Bo—Used in both Intake and Exhaust seats
c—Camshaft Bearings
Car—Carter Carburetor
CAS—Cast Alloy Steel
Ch—Chain
CI—Cast Iron

SPECIFICATIONS

ENGINE MAKE AND MODEL	Number of Cylinders, Bore and Stroke (In.)	MAX. BRAKE H.P. at R.P.M.		Piston Displacement (Cu. In.)	Compression Ratio	TORQUE	VALVES							Front End Drive—Type	Piston Material	No. of Rings per Piston	Crankpin, Diameter and Length (In.)	Oil Pressure to—	CARBURETOR		Engine Weight without Carburetor or Ignition (Lb.)
		With Bare Engine	With Standard Accessories			Maximum Torque at R.P.M. (Lb. Ft.)	Arrangement	Max. Head Diam. (In.) Intake	Max. Head Diam. (In.) Exhaust	Stem Diam. (In.) Intake	Stem Diam. (In.) Exhaust	Seats Angle (Deg.)	Seats Inserts Used?						Make	Size	
HERCULES—Con't																					
QXC-3, QXC-5	6-3⅛x4½	73-3500	62-3500	221.0	5.85	159-1000 (BE)	L	1.62	1.37	.310	.310	30	N	HG	Al	4	2.00x1.25	abe	Op	1¼	483
QXD-3, QXD-5	6-3⅛x4½	73-3000	62-3000	230.0	6.50	171-1100 (BE)	L	1.62	1.37	.310	.310	30	N	HG	Al	4	2.00x1.25	abe	Op	1¼	485
JXA	6-3⅜x4¼	63-2800	53-2800	228.0	5.16	141-1000 (BE)	L	1.75	1.62	.373	.373	45	N	HG	CI	4	2.00x1.50	abe	Op	1¼	550
JXF	6-3⅜x4¼	71-3000	60-3000	232.3	6.16	151-1200 (BE)	L	1.75	1.62	.373	.373	45	N	HG	Al	4	2.00x1.50	abe	Op	1¼	555
JXE-3, JXG	6-3½x4¼	77-3000	65-3000	246.0	6.11	169-1000 (BE)	L	1.75	1.62	.373	.373	45	N	HG	Al	4	2.00x1.50	abe	Op	1¼	555
JXB	6-3⅝x4¼	84-3000	71-3000	263.0	5.40	195-1000 (BE)	L	1.75	1.62	.373	.373	45	N	HG	Al	4	2.00x1.50	abe	Op	1¼	560
JXC	6-3¾x4¼	87-3000	74-3000	282.0	5.90	215-1000 (BE)	L	1.75	1.62	.373	.373	45	N	HG	Al	4	2.00x1.50	abe	Op	1¼	585
JXD	6-4x4¼	110-3000	93-3000	320.0	6.50	243-1200 (BE)	L	1.75	1.62	.373	.373	45	N	HG	Al	4	2.00x1.50	abe	Op	1¾	570
WXC	6-4x4½	103-2800	87-2800	339.0	5.96	255-1100 (BE)	L	1.75	1.75	.373	.373	45	N	HG	CI	4	2.25x1.50	abe	Op	1¾	805
WXC-2	6-4½x4½	110-2800	93-2800	360.8	5.96	271-1100 (BE)	L	1.75	1.75	.373	.373	45	N	HG	CI	4	2.25x1.50	abe	Op	1¾	810
WXC-3	6-4¼x4½	117-2800	99-2800	383.0	5.96	288-1100 (BE)	L	1.75	1.75	.373	.373	45	N	HG	CI	4	2.25x1.50	abe	Op	1¾	820
WXLC	6-4x4¾	111-2800	94-2800	358.0	6.29	268-1100 (BE)	L	1.75	1.75	.373	.373	45	N	HG	Al	4	2.25x1.50	abe	Op	1¾	811
WXLC-3	6-4¼x4¾	126-2800	107-2800	404.0	6.29	302-1000 (BE)	L	1.75	1.75	.373	.373	45	N	HG	Al	4	2.25x1.50	abe	Op	1¾	825
YXC	6-4⅜x4¾	116-2400	98-2400	428.4	6.29	335-1150 (BE)	L	2.00	2.00	.373	.373	45	N	HG	CI	4	2.50x1.75	abe	Op	1¾	975
YXC-2	6-4½x4¾	123-2400	104-2400	453.0	6.29	357-1100 (BE)	L	2.00	2.00	.373	.373	45	N	HG	CI	4	2.50x1.75	abe	Op	1¾	975
YXC-3	6-4⅝x4¾	129-2400	109-2400	478.8	6.29	374-1100 (BE)	L	2.00	2.00	.373	.373	45	N	HG	CI	4	2.50x1.75	abe	Op	1¾	975
RXB	6-4½x5¼	121-2400	103-2400	500.9	5.41	362-1100 (BE)	L	2.00	2.00	.373	.373	45	N	HG	Al	5	2.62x2.00	abe	Op	1¾	1000
RXC	6-4⅝x5¼	131-2400	111-2400	529.2	5.41	395-1000 (BE)	L	2.00	2.00	.373	.373	45	N	HG	Al	5	2.62x2.00	abe	Op	1¾	1010
RXLC	6-4⅝x5¼	144-2400	122-2400	529.2	6.20	413-1000 (BE)	L	2.00	2.00	.373	.373	45	N	HG	Al	5	3.00x2.00	abe	Op	1¾	1195
RXLD	6-4¾x5¼	152-2400	129-2400	558.0	6.20	438-1000 (BE)	L	2.00	2.00	.373	.373	(h)	N	HG	Al	5	3.00x2.00	abe	Op	1¾	1195
HXB	6-5x6	160-2100	136-2100	707.0	5.75	502-900 (BE)	L	2.43	2.31	.498	.498	30	E	HG	Al	4	3.00x2.25	abce	Op	2	1810
HXC	6-5¼x6	177-2100	150-2100	779.0	5.69	550-1000 (BE)	L	2.43	2.31	.498	.498	30	E	HG	Al	4	3.00x2.25	abce	Op	2	1810
HXD	6-5½x6	184-1800	156-1800	855.0	5.73	630-900 (BE)	L	2.43	2.31	.498	.498	30	E	HG	Al	4	3.00x2.25	abce	Op	2	1830
HXE	6-5¾x6	200-1800	170-1800	935.0	5.50	695-900 (BE)	L	2.43	2.31	.498	.498	30	E	HG	Al	4	3.00x2.25	abce	Op	2	1830
INTERNATIONAL																					
GRD-175	6-3x4⅛	64-3400	58-3400	174.93	6.70	120-8-1000(BE)	L	1 11/16	1 15/16	.372	.371	45	E	Ch	CI	4	2.00x1 5/16	abcde	Zen	1¼	535
GRD-214	6-3⅛x4½	82-3400	73-3200	213.24	6.30	160-1200 (BE)	L	1 11/16	1 15/16	.372	.371	45	E	Ch	CI	4	2.00x1 5/16	abcde	Zen	1¼	536
GRD-233	6-3⅛x4½	93-3400	80-2400	232.65	6.30	181-1000 (BE)	L	1 11/16	1 15/16	.372	.371	45	E	Ch	CI	4	2.00x1 5/16	abcde	Zen	1¼	568
FAC-241	6-3⅝x4½	95-3200	84-3200	241.54	6.20	192-1200 (BE)	I	1 11/16	1 15/16	.342	.342	45	E	HG	Al	4	2 1/16x1 1/16	abcde	Zen	1¼	773
FAC-259	6-3½x4½	101-3200	88-2800	259.76	6.20	211-1600 (BE)	I	1 11/16	1 15/16	.342	.342	45	E	HG	Al	4	2 1/16x1 1/16	abcde	Zen	1¼	768
FBC-318	6-3⅞x4½	100-2800	85-2600	318.41	5.40	241-800 (BE)	I	2¼	1⅝	.372	.372	15	E	HG	Al	4	2¼x1⅝	abcde	Zen	1¼	953
FBC-361	6-4⅛x4½	111-2700	94-2600	360.82	5.20	268-1500 (BE)	I	2¼	1⅝	.372	.372	15	E	HG	Al	4	2¼x1⅝	abcde	Zen	1¼	933
FBC-401	6-4⅛x5	114-2600	99-2400	400.92	5.20	308-800 (BE)	I	2¼	1⅝	.372	.372	15	E	HG	Al	4	2¼x1⅝	abcde	Zen	1¼	984
FBC-450	6-4⅜x5	120-2400	104-2300	450.99	5.20	331-800 (BE)	I	2¼	1⅝	.372	.372	15	E	HG	Al	4	2¼x1⅝	abcde	Zen	1½	973
FEB-648	6-5x5½	140-2100	115-1750	648.00	4.40	460-1000 (BE)	I	2⅜	2⅜	.43	.43	45	E	HG	Al	4	2¾x2¼	abcde	Zen	1½	1825
REO																					
GC-228	6-3⅜x4¼	83-3200	.....	228.0	6.20	177-1000 (BE)	L	1.78	1.62	.373	.373	45	E	Ch	Al	4	2.19x1.50	abcde	Zen	1¼	758*
GC-245	6-3⅜x4¼	89-3100	.....	245.0	6.20	191-1000 (BE)	L	1.78	1.62	.373	.373	45	E	Ch	Al	4	2.19x1.50	abcde	Zen	1¼	763*
GC-288	6-3½x5	94-3000	.....	288.0	6.00	221-1200 (BE)	L	1.78	1.62	.373	.373	45	E	Ch	Al	4	2.19x1.50	abcde	Zen	1½	785*
GC-310	6-3⅝x5	101-3000	.....	310.0	5.80	291-900 (BE)	L	1.78	1.62	.373	.373	45	E	Ch	Al	4	2.19x1.50	abcde	Zen	1½	785*
WAUKESHA																					
6BL	6-3⅛x4¼	72-2800	51-2000	245.0	5.70	165-1300 (BE)	L	1.68	1.43	.375	.375	45	E	HG	Al	4	2.00 1.50	abcde	Op	1¼	675
6BM	6-3⅜x4¼	77-2800	54-2000	263.0	5.70	178-1100 (BE)	L	1.68	1.43	.375	.375	45	E	HG	Al	4	2.00x1.50	abcde	Op	1¼	685
6BK	6-3¾x4¼	82-2800	59-2000	282.0	5.70	189-1100 (BE)	L	1.68	1.43	.375	.375	45	E	HG	Al	4	2.00x1.50	abcde	Op	1½	690
6BZ	6-4x4¼	86-2800	65-2000	320.0	5.75	210-1000 (BE)	L	1.68	1.43	.375	.375	45	E	HG	Al	4	2.00x1.50	abcde	Op	1½	705
6MKR	6-4⅛x4¾	98-2500	58-1600	381.0	5.34	270-800 (BE)	L	1.93	1.43	.375	.375	45	E	HG	Al	4	2.25x1.50	abcde	Op	1½	890
6MZR	6-4¼x4¾	106-2500	66-1600	404.0	5.38	286-800 (BE)	L	1.93	1.43	.375	.375	45	E	HG	Al	4	2.25x1.50	abcde	Op	1¾	920
140-GS	6-4¼x5½	122-2250	114-2250	468.0	5.80	362-1000 (BE)	I	2.12	1.56	.434	.434	(h)	E	HG	Al	4	2.62x2.00	abcdeg	Op	1¾	1350
6SRLR	6-4⅝x5½	112-2250	105-2250	462.0	5.50	330-600 (BE)	L	2.16	1.65	.375	.375	30	E	HG	Al	4	2.75x1.75	abcde	Op	1¾	1185
140-GK	6-4½x5½	136-2250	128-2250	525.0	5.80	407-1000 (BE)	I	2.12	1.56	.434	.434	(h)	E	HG	Al	4	2.62x2.00	abcdeg	Op	1¾	1390
6SRKR	6-4⅝x5⅝	125-2250	120-2250	517.0	5.50	389-600 (BE)	L	2.16	1.65	.375	.375	30	E	HG	Al	4	2.75x1.75	abcde	Op	1¾	1225
145-GS	6-4¾x6	152-2000	143-2000	638.0	5.60	481-1000 (BE)	I	2.37	1.84	.500	.500	(h)	E	HG	Al	4	3.00x2.25	abcdeg	Op	2	1900
6GAL	6-5x5½	136-2000	124-2000	648.0	5.00	462-750 (BE)	I	2.21	1.75	.437	.437	45	E	HG	CI	4	3.00x2.00	abcdeg	Op	2	2225
6RBR	6-5x5¾	150-2000	144-2000	677.0	5.35	492-800 (BE)	L	2.40	2.40	.437	.437	45	E	HG	Al	4	2.75x2.50	abcde	Op	2	1575
145-GK	6-5¼x6	186-2000	177-2000	779.0	5.60	586-1000 (BE)	I	2.37	1.84	.500	.500	(h)	E	HG	Al	4	3.00x2.25	abcdeg	Op	2	1930
6GAK	6-5½x5½	155-2200	143-2000	784.0	4.80	545-900 (BE)	I	2.21	1.75	.437	.437	45	E	HG	CI	4	3.00x2.00	abcdeg	Op	2	2250
6WAL	6-5¾x6½	200-1800	162-1300	1013.0	5.00	735-800 (BE)	I	2.65	2.22	.500	.500	(h)	E	HG	CI	4	3.37x2.37	abcdeg	Op	2½	3000
6WAK	6-6¼x6½	235-1800	193-1300	1197.0	5.20	885-900 (BE)	I	2.65	2.22	.500	.500	(h)	E	HG	CI	4	3.37x2.37	abcdeg	Op	2½	3050
WHITE																					
(H) 35A	4-3⅝x3½	40-2800	33-2800	145.0	5.70	88-1200 (EA)	OH	1.57	1.22	.372	.372	30	E	HG	CI	4	2.25x1.43	abc	Zen	1¼	475
100A	6-3⅞x4½	90-2800	.....	250.0	6.75	185-1200 (BE)	L	1.65	1.62	.375	.375	45	E	HG	Al	5	2.18x1.34	abcde	Str	1¼	973
110A	6-3⅞x4½	100-2600	.....	270.0	6.50	200-1300(BE)	L	1.65	1.62	.375	.375	45	E	HG	Al	5	2.18x1.34	abcde	Str	1¼	973
120A	6-3⅞x4½	110-2600	.....	318.0	6.40	285-1200 (BE)	L	1.65	1.62	.375	.437	45	E	HG	Al	5	2.18x1.34	abcde	Str	1¼	993
140A	6-3⅞x5½	125-2600	.....	362.0	6.28	285-1100 (BE)	L	1.65	1.62	.375	.437	45	E	HG	Al	5	2.18x1.34	abcde	Str	1¼	1051
WILLYS																					
441	4-3⅛x4⅜	63-3900	.....	134.2	6.48	108-1800 (BE)	L	1.53	1.46	.373	.373	45	N	Ch	C1	3	1.94x1.30	abce	Car	1¼	364

CT—Cast Iron, Tin plated
d—Wrist Pins
e—Timing Gears or Chain
E—Used on Exhaust valve seats
(EA)—Engine with Standard Accessories

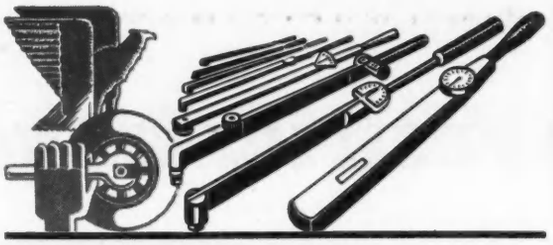
f—Accessories drive
g—Rocker Arms and Shafts
(h)—Intake 30°, Exhaust 45°
HG—Helical Gear
I—In Head (Valves)

(k)—Intake 30°, Exhaust 44°
L—Valves at Side (L-Head)
N—No or none
OH—Overhead
Op—Optional

r—Reverse Gear
SS—Semi-Steel
Str—Stromberg Carburetor
t—Tappets and Valve Mechanism
Zen—Zenith Carburetor

TENSION SPECIFICATIONS

FOR USE WITH TENSION WRENCHES



KEEP 'EM ROLLING

LISTED BY ENGINE MAKES, COVERING CYLINDER HEADS, MAIN AND CONNECTING ROD BEARINGS

All tensions are given in pounds-feet. To convert these figures into pounds-inches for use with tension wrenches so calibrated, simply multiply them by 12.

Engine Make	Cylinder Head	Main Bearings	Connecting Rod Bearings
AUTOCAR			
A, UA, B, UB, C10, C10T, U10, 10T, C20, C20T, U20, U20T	50- 55	60- 70	55- 60
All Others	80- 85	130-140	85- 90
BUDA			
All Models	3/8"- 60- 70 1/2"- 75- 85 5/8"- 95-105 3/4"-125-135 7/8"-150-160	1 1/8"-195-200 1 1/4"-210-230 1 3/8"-230-250 1 1/2"-245-275 1 5/8"-285-315 1 11/16"-325-350	
CHEVROLET			
(1938) (Note 1)	67	106	.....
(1939)	78	.....	.....
(1940-41-42)	75- 80	100-110	40- 45
CONTINENTAL			
A6244 (Note 4)	70- 75	100-110	35- 40
B6371, B6405 (Note 6)	70- 75	100-110	100-110
E600, E601, E602, E603, (Note 5)	100-110	100-110	100-110
F4124, F4140, F4162 (Note 4)	70- 75	100-110	35- 40
F6170, F6199, F6209, F8218, F8226 (Note 4)	3/8"-35-40 1/2"-70-75	100-110	35- 40
M6271, M6290, M6330, M6253 (Note 6)	70- 75	1/2"-100-110 5/8"-130-140	70- 75
20R, 21R, 22R (Note 5)	100-110	100-110	100-110
DODGE			
(1938-42)	Nuts 53-57 1/2 Plain head cap screws 65-70 Cupped head cap screws 67 1/2-72 1/2	75- 80	60- 65
Diesel	80- 85	75- 80	60- 65
FORD (1938-42)	85 h.p. aluminum—40 60 h.p. aluminum—30		
(Note 2)	All iron—50		
GEN. MOTORS 216, 223, 230	60- 70	75- 85	40- 50

Engine Make	Cylinder Head	Main Bearings	Connecting Rod Bearings
GEN. MOTORS (Cont.)			
239, 257, 286	60- 70	90-100	65- 75
331, 400, 450	65- 75	90-100	90-100
479, 529, 707	100-120	100-120	100-120
228, 236, 248, 256, 270	60- 70	70- 80	40- 50
278, 308	65- 75	75- 85	65- 75
361, 426, 451, 477	65- 75	90-100	90-100
Diesel: 3-71, 4-71, 6-71 (Note 3)	1670-170 Cold (180) Hot	175-180	65- 70
479, 529, 707	110-120	90-100	90-100
HERCULES			
ZX Series	42	77	25
IX Series	42	77	42
OO Series	60	105	53
QX Series	60	*60 **70	39
JX Series	60	*80 **70	56
WX Series	60	*70 **105	105 ***53
YX, RX Series	60	*105 **123	105
RXL Series	74	175	158 †123
HX Series	105	193 **210	263
DOO Series	158	*77 *95	140
DJX Series	158	*77 **95	140
DWX Series	158	175	158
DRX Series	5/8"-175 1"-280	175	158
DHX Series	11/16"-175 1 1/16"-350	*193 **210	263
DFX Series	210	260	263
INTERN'L HARVESTER	1/8"- 56 1/2"- 67	1/2"- 75 1/8"- 75	1/8"-55-70
GRD Engines	5/8"- 93	5/8"- 93	
FA Engines FB Engines	1/8"-60		
LYCOMING			
AFE, AEF	52 1/2- 56		
ASE, BF	49- 52 1/2		

Engine Make	Cylinder Head	Main Bearings	Connecting Rod Bearings
REO			
S140, S209	60- 61	87- 98	49-52 1/2
S228, S3-268, S3L268, S5-309, GC228, GC245, GC288, GC310	83-100	67-75	70-75
STUDEBAKER			
J5, J10, J15, J15M, J15B, K5, K10, K15, K15M, K15B, L5 (Note 7)	83	92	54
Coupe Express, Standard (1941)	50	92	54
Heavy Duty (1941)	83	92	54
WAUKESHA			
6BL, 6BM, 6BK, 6BKH	73-75	88-92	67-69
6ML, 6MK, 6MKR, 6MZ, 6MZR	73-75	96-100	67-69
6SRLR, 6SRKR	73-75	160-164	121-125
130HS, 130HL, 130GS, 130GL	96-100	109-113	67-69
140HS, 140HK, 140GS, 140GK	130-134	130-134	121-125
CHK, HL	130-134	130-134	67-69
WK, WOK	130-134	130-134	88-88
FEB	130-134	125-130	67-69
6GAK, 6GAL	130-134	125-130	73-75
6RBR	117-121	130-134	73-75
HBKH	130-134	130-134	73-75
145HS, 145HK, 145GS, 145GK	130-134	242-250	73-75
6WAK, 6WAKH	146-150	242-250	86-88
6EK, 6EKH, 6LK, 6LRD, 6LRH	292-300	242-250	165-174
WHITE All Models	3/8"- 28- 32 7/16"- 48- 52 1/2"- 70- 75 7/8"-105-115 5/8"-140-150 3/4"-175-185		
WILLYS 48, 440, 441, 442 Note 7	65- 75	65- 70	50- 55

ABBREVIATIONS:

* Center and Rear. ** Front and Intermediate.
*** Connecting Rod 1/8 in. † Babbitt.

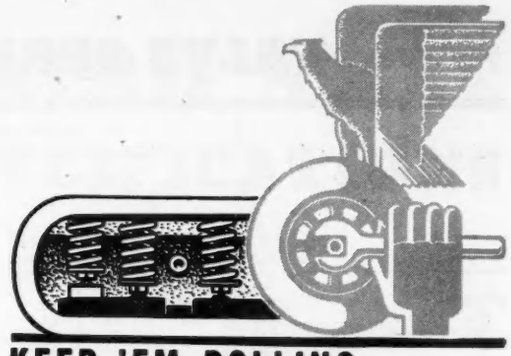
Note 1—Rocker Arm Support 29 (1938), 27 1/2 (1939).
Note 2—Spark Plug Tensions:
7/8-18, cast iron head—34-38
18mm, cast iron head—28-32
18mm, aluminum head—24-28
14mm, cast iron head—24-28
14mm, aluminum head—20-24
Note 3—Injector crab nut 11.
Note 4—All 18 mm. plugs 33-42.
Note 5—Manifold 100-110.
Note 6—Manifold 70-75.
Note 7—Sparkplug.
Iron head—28-30.
Aluminum head—26-28.

POLISHING SHELL TYPE REFLECTORS

Polishing reflectors does not consist of carelessly wiping with any old rag. A seemingly bright polish may be obtained in this manner, but very shortly thereafter an uncleanable discoloration will set in and the reflector is ruined.

The reflector should first be washed with warm soapy water to remove the loose dirt and lighter road film, then thoroughly rinsed with plain water. Polish should then be applied with a soft rag, preferably flannel. In polishing an in-and-out movement from the center of the reflector to the outside edge should be used. After allowing the polish to dry, the reflector should be wiped with a piece of dry flannel. There are available many manufactured polishes which do a satisfactory job.

VALVE SPRING PRESSURES



KEEP 'EM ROLLING

MANUFACTURERS' RECOMMENDATIONS BY TRUCK AND ENGINE MAKES

ABBREVIATIONS: I.—Inner O.—Outer Int.—Intake Exh.—Exhaust

TRUCKS	Year	VALVE SPRINGS — Valve Open: Pressure (Ave.) Pounds	Valve Open: Length Inches	Valve Closed: Pressure (Ave.) Pounds	Valve Closed: Length Inches
AUTOCAR					
All models having the 315, 331, 358, 377, 404, 408, 447, 453 and 501 cu. in. engine		110	2 1/8	76	2 1/2
C-10, C-20, U-10, U-20		58	1.594	43	1.920
DC-10, DC-20	O.	55	1.406	31	1.781
	I.	37	1.281	19	1.656
C-9044	O.	84	3 5/8	47	3 17/32
	I.	45	2 11/16	27	3 1/4
DC-100-T, DC-100-D, DC-10044, DC-10062, DC-10064		136	2 3/16	87	2 1/2
BROCKWAY					
78	1939-1942	98-104	1 5/8	42.5-47.5	1 33/64
83, 88, 92, 94	1st 1939-1942	105-111	1 17/32	43.6-47.6	2 3/16
	2nd 1939-1942	111-118	1.521	53-59	1 5/8
112, 128, 146, 147	1940-1942	111-118	1.521	53-59	1 5/8
152, 153, 154, 162, 156, 166	O. 1940-1942	102-110	1.521	45-51	1 5/8
	I. 1940-1942	28-32	1 11/32	11.3-14.3	1 11/32
170, 195, 175, 220, 240, 260	O. 1939-1942	105-115	1 5/8	54.7-58.7	2 1/4
	I. 1939-1942	47-53	1 13/32	20.4-24.4	2 7/32
96, 130, 125X, 145, 150X4, 150X5, 160X, 165X	O. Up to 1940 Inclusive	90-98	1 13/32	43.5-49.5	2 1/4
	I.	31-35	1 1/4	16.6-19.6	2 7/32
CHEVROLET					
All models	1939-1940	127	1 1/2	52	1 13/32
All models	1941	128	1 1/2	55	1 13/32
CORBITT					
13B, F-12, 18SB2, 18SB4, 18SB6	1st 1939-1940	105-111	1 37/64	43.6-47.6	2 3/16
	2nd 1940-1942	111-118	1.521	53-59	1 5/8
17B, 14BT, 17BT, F-14, F-19, 25SB4, 25SB2, 25SB6	1940-1942	111-118	1.521	53-59	1 5/8
21B, 26D, 18BT, F-18, 35SB4, 35SB2	O.	90-98	1 23/32	43.5-49.5	2 1/4
	I.	31-35	1 1/4	16.6-19.6	2 7/32
22BT, 27BT, F-23, F-27, F-35, 40SB2, 40SB4, 40SD6	O. 1939-1942	105-115	1 5/8	54.7-58.7	2 1/4
	I. 1939-1942	47-53	1 13/32	20.4-24.4	2 7/32
50SD6, 54SD6	O.	84	3 5/8	47	3 17/32
	I.	45	2 11/16	27	3 1/4
D18BT		113	2	69	2 13/32
D27B6T		136	2 3/16	87*	2 1/2
DIAMOND T					
404, 404SC, 404C, 406, 509, 509SC, 509C, 612, 612SC, 612C, 614, 614SC, 614C		58	1.594	43	1.920
702, 702C, 805, 805C, 806, 806C, 900		102	2 7/32	50	2 11/64
DODGE					
TC, TD, VC, VD	1939-1940	80	1 7/16	36	1 3/4
TE, TF, TG, TH	1939	105	1 13/32	42 1/2	1 3/4
TL, TK, RO, RP, VL, VK, WL, WK VF, VM, VG, VH, VR, VS, WC, WD, WF, WFM, WG, WH, WGM, WHM	1939-1942	94	2 3/4	57 1/2	3 1/16
	1940-1942	111	1 5/8	42 1/2	1 3/4
FEDERAL					
8	1940-1942	37	1 3/32	19	1 31/64
15, 18, 20, 25, 29	1939-1942	52	1 7/16	31	1 13/16
40, 50, 35, 45, 55	1939-1942	60 1/2	2 1/16	47	2 7/16
C7, C8, 63	1939-1942	94	2 23/32	59	2 31/32
62	O. 1939-1942	50	1 31/32	22 1/2	2 3/32
	I. 1939-1942	110	1 7/8	56 3/4	2 1/4
FORD					
60	1939-1940	48-52	1.788	26-30	2.05
85, 95, 30	1940-1942	76-80	1.827	37-40	2.13
F. W. D.					
HS, T26, HA		101-119	1 3/4	56-66	2 1/8
HG, HR, HM, HH6, CUA, CU, T32		93-109	1 31/32	59-69	2 11/32
SUA, SU, YU, MJ5, MJ6, T40		89-99	2 1/32	54-64	2 13/32
M7, T45		105-115	3 11/32	65-75	3 11/32

TRUCKS	Year	VALVE SPRINGS — Valve Open: Pressure (Ave.) Pounds	Valve Open: Length Inches	Valve Closed: Pressure (Ave.) Pounds	Valve Closed: Length Inches
GENERAL MOTORS TRUCK					
AC & CC-100, 150, 250, 300, 350, 400, 450; ACS, CCS & CF-300, 350, 400 & 450; ACT, CCT, ACW, CCW, AFT, CFT, AFW & CFW-350 & 400; AF-310, 360, 410 & 460; ACK, CCK, ACKW & CCKW-350; ACV & CCV-100; AF & APF-240	1939-1942	130	1.495	55.5	1.821
AC, ACR, AF & AFR-520; AC & AF-500, 550, 600 & 650; ACT & AFT-500 & 600; ACW & AFW-600	1939-1942	100	1 11/64	54	1 13/64
AC, ACR, AF & AFR-620; AC, AF & AY-700, 800 & 850; ACT, ACW, AFT & AFW-700; AC, ACR, AF & AFR-720 & 750; ACX-870 & 890; AC-770	1939-1942	108	1 11/64	54	1 13/64
GRAMM					
11A, 21A, 31A, 41A		41	1 3/32		
		37	1.281	17	1 31/64
46A, 56A, 71A, 76A, 86A		58	1.594	19	1.656
96A		102	2 3/32	43	1.920
D46A, D56A, D71A	O.	55	1.406	50	2 11/64
	I.	37	1.281	31	1.781
GF	O.	84	3 5/16	19	1.656
	I.	45	2 11/16	47	3 1/32
				27	3 1/4
HUG					
19W, 23W, 85W, 83W					
87W, 42W, 87W6	1938-1942	110-119	1 3/4	61-66	2 1/8
92U, 43W, 44-4, 45-4	1939-1942	101-109	1 23/32	64-69	2 13/32
98, 99, 99S	1939-1942	94-99	2 1/16	59-64	2 7/32
	1939-1942	110-115	3 1/32	70-75	3 1/32
INTERNATIONAL HARVESTER					
D2, D15, D30, D300, K1, K2, K3, K4, K5	1937-1942	85	1 11/16	47	2 1/4
D35, D40, D400, K6, K7	1937-1942	80	1.707	55	2
D50, D500, D60, D70, D700, K8, K10, K11	O. 1937-1942	90	1 25/32	40	2 9/32
	I. 1937-1942	45	1 1/32	20	1 1/32
A7, A8, AR628F	O. 1937-1942	140	2 1/16	61	2 1/2
	I. 1937-1942	79	1 23/32	36	2 1/32
KENWORTH					
505, 506, 507, 508, 509, 514, 515, 516, 510, 511, 512, 519, 520, 521, 522, 523, 524, 548, 549, 550, 552		136	2 3/16	87	2 1/2
543, 544, 545, 546		113	2	69	2 13/32
513, 536, 537, 538, 551		58	1.594	43	1.920
553, 554, 555, 556		64	2 1/16	50	2 5/16
MARMON-HERRINGTON					
J-5, J-6, JJ-5, JJ-6, LD-5, LLD-5, OT-4, OOT-4	1941-1942	76-80	1.827	37-40	2.13
DSD-100, DSD-200, DSD-300	1941-1942	58	1.594	43	1.920
DSD-400, DSD-500, DSD-550, LSD-550DR, DSD-600, DSD-700, DSD-800	1941-1942	102	2 3/32	50	2 11/64
DSD-900, DSD-1000	O. 1941-1942	84	3 5/16	47	3 1/32
	I. 1941-1942	45	2 11/16	27	3 1/4
OSHKOSH					
JCB, JDS, W-100, W-200	1939-1942	58.7	1.594	43	1.920
W-300, W-400, W-500, W-600, W-700, W-800	1939-1942	102	2 3/32	50	2 11/64
BG3, GD	O. 1939-1942	84	3 5/16	47	3 1/32
	I. 1939-1942	45	2 11/16	27	3 1/4
STERLING (See Cummins & Waukesha Listing)					
STUDEBAKER					
J5-K5, J10-K10, J15-K15, M16	1937-1942	125-135	1 3/4	57	2 1/32
J20-K20, J25-K25	1937-1940	75-80	1 13/32	41-45	1 13/16
J30-K30	1937-1940	80-85	2 1/32	45-50	2 5/16
M5-M15	1941-1942	90-94	1 7/16	37-41	1 3/4

VALVE SPRING PRESSURES (CONTINUED)

	Year	VALVE SPRINGS			
		Valve Open		Valve Closed	
		Pressure (Ave.) Pounds	Length Inches	Pressure (Ave.) Pounds	Length Inches
WALTER					
FN		64	2 1/16	50	2 3/4
FM, FKM, FCK, FC — Exh.		67	2 1/32	52	2 3/32
FM, FKM, FCK, FC — Int.		84	2 3/8	52	2 3/32
FB, FBR		140	3 1/4	100	3 5/8
FXB — O.		84	3 5/8	47	3 1/32
FXB — I.		45	2 11/16	27	3 1/4
ADK — O.		48	1.449	27	1.844
ADK — I.		30	1.355	17	1.750
ADB, ADV		136	2 1/16	87	2 11/16
WHITE					
706, 708, 710, 718, 750, 810, 818, 822, 850	1939-1940	135	1 7/8	96	2 1/4
700, 704, 805, 904, WA-14, WA-18, WA-20, WA-22, WA-26, WA-34, WA-114, WA-118, WA-120, WA-122, WA-126, WA-134, 782	1939-1942	121	1 11/16	82	2 1/16
WILLYS					
38, 48, 440	1938-1940	85.5	1 11/16	46	2 1/4

ENGINES

CONTINENTAL					
A6244 — 1st	1939-1940	105-111	1 31/32	43.6-47.5	2 1/16
A6244 — 2nd	1940-1942	111-118	1.521	53-59	1 7/8
B-6371-B6405 — O.	1940-1942	102-110	1.521	45-51	1 7/8
B-6371-B6405 — I.	1940-1942	28-32	1 13/32	11.3-14.3	1 31/32
E600, E601, E602, E603 — O.		90-98	1 41/64	43.5-49.5	2 1/4
E600, E601, E602, E603 — I.		31-35	1 3/4	16.6-19.6	2 5/32
F4124-F4140-F4162	1939-1942	78-86	1 21/32	31-37	1 41/64
F6170-F6199-F6209-F6218	1939-1942	98-104	1 3/4	42.5-47.5	1 31/32
M6271-M6290-M6330	1940-1942	111-118	1.521	53-59	1 7/8
20R, 21R, 22R — O.	1939-1942	106-115	1 3/4	54.7-58.7	2 1/4
20R, 21R, 22R — I.		47-53	1 31/32	20.4-24.4	2 5/32
CUMMINS					
A		113	2	69	2 11/32
H		136	2 1/16	87	2 11/32
K, KO, L, VL		238	2 7/8	110	3 1/16
HERCULES					
BX-ZX		35	1 13/32	22	1 7/8
NX-IX-3-IX-5		42	1 7/16	21	1 7/16
OO-JX		58	1.594	43	1.920
K-L-G-E		73	3 1/16		3 3/8

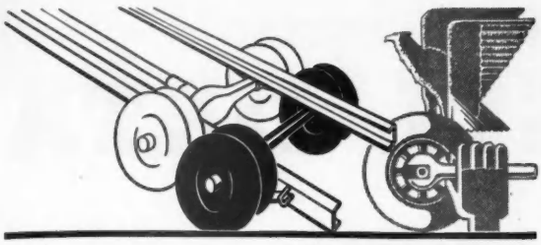
	Year	VALVE SPRINGS			
		Valve Open		Valve Closed	
		Pressure (Ave.) Pounds	Length Inches	Pressure (Ave.) Pounds	Length Inches
HERCULES—Cont.					
TX		100	3 1/16		3 3/8
QX		41	1 3/32	17	1 11/32
QX		37	1.281	19	1.656
OX-WX-WXL-YX-RX-RXL		102	2 3/8	50	2 11/32
HX — O.		84	3 5/8	47	3 1/32
HX — I.		45	2 11/16	27	3 1/4
DIX-DOO-DXJ — O.		37	1.281	19	1.656
DIX-DOO-DXJ — I.		55	1.406	31	1.781
DRX — O.		48	1.449	27	1.844
DRX — I.		30	1.355	17	1.750
DHX-DFX — O.		57	2 11/32	32	3 1/32
DHX-DFX — I.		94	2 11/32	55	3 1/32
WAUKESHA					
ICK		24	1 1/2	16	1 3/16
FCS, FC		66	1 5/8	36	1 13/32
XAH		68	1 5/8	56	1 7/8
XAH		71	1 5/8	56	1 7/8
XBKH — Exh. O.		95	1 13/32	43	2 1/32
XBKH — Exh. I.		51	1 1/2	28	1 7/8
XBKH — Int. O.		89	1 13/32	35	2 1/32
XBKH — Int. I.		48	1 13/32	24	1 11/16
130HS, 130HL — Exh. O.		55	1 7/16	26	1 13/32
130GS, 130GL — Exh. I.		100	1 7/8	39	2 1/8
130GS, 130GL — Int. O.		55	1 7/16	26	1 13/32
130GS, 130GL — Int. I.		100	1 7/8	39	2 1/8
VIM, VIK, VIS, VIL		53	1 13/32	38	2 1/8
VBKH — Exh. O.		55	1 13/32	32	1 7/8
VBKH — Exh. I.		51	1 21/32	25	1 13/32
VBKH — Int. O.		51	1 13/32	28	1 1/2
VBKH — Int. I.		33	1 13/32	22	1 11/16
VRZ, VRZG, VRZH — O.		72	1 7/8	36	1 3/4
VRZ, VRZG, VRZH — I.		33	1 13/32	22	1 11/16
CHK, CHS		78	2 1/16	54	2 1/2
6BL, 6BK, 6BM, 6BZ		82	1 3/4	48	2 1/8
6BKH — Exh. O.		91	1 3/4	39	2 1/16
6BKH — Exh. I.		49	1 13/32	26	1 13/32
6BKH — Int. O.		98	1 13/32	35	2 5/32
6BKH — Int. I.		53	1 1/2	24	1 11/16
6MK, 6MZ, 6MKR, 6MZR		64	2 1/16	50	2 5/8
140GS, 140GK, 140HS, 140HK — O.		75	1 13/32	20	2 1/16
140GS, 140GK, 140HS, 140HK — I.		55	1 7/16	26	1 13/32
6SRLR, 6SRKR		87	2 11/32	52	2 11/32
6SRLR, 6SRKR		84	2 5/16	52	2 5/32
145GS, 145GK, 145HS, 145HK		158	2 5/8	87	2 11/32
145GS, 145GK, 145HS, 145HK		100	2 1/16	42	2 11/32
6GAK, 6GAL		140	2 1/16	61	2 1/2
6GAK, 6GAL		79	1 13/32	36	2 1/32
6RBR		140	3 1/4	100	3 5/8

ABBREVIATIONS: I.—Inner O.—Outer Int.—Intake Exh.—Exhaust

New Truck Registrations by Makes by Months

	Auto-car	Brock-way	Chev-rolet	Diam-ond T	Dodge	Fed-eral	Ford	G.M.C.	Hud-son	Inter-nat'l	Mack	Ply-mouth	Reo	Ster-ling	Stude-baker	White	Willys	Misc.	Total†
January 1941	189	156	15,801	447	4,498	120	15,797	3,338	65	7,445	673	866	79	34	231	662	82	300	50,830
January 1940	139	117	15,574	535	4,343	152	13,222	3,046	56	5,480	571	718	11	22	85	433	173	326	45,003
February 1941	139	128	15,778	436	4,141	136	16,531	3,118	63	6,992	532	747	90	35	231	658	82	287	50,124
February 1940	94	92	13,789	425	4,336	113	11,960	2,638	60	4,981	425	767	4	31	101	380	182	351	40,729
March 1941	215	175	21,053	583	5,354	112	18,662	3,950	85	8,504	796	1,023	138	33	383	802	168	377	62,413
March 1940	136	123	17,792	573	5,355	161	14,962	3,444	76	6,897	533	949	6	24	154	556	233	316	52,290
April 1941	250	229	22,497	701	6,038	137	16,769	4,267	94	9,129	931	1,041	154	48	475	918	186	352	64,236
April 1940	154	102	18,996	563	5,650	152	15,416	3,503	91	7,027	655	1,070	7	35	133	763	222	307	54,846
May 1941	228	244	22,332	561	6,012	156	17,290	4,224	84	9,023	903	1,066	157	43	434	811	252	357	64,177
May 1940	156	143	16,735	501	5,453	151	13,769	3,704	92	6,715	756	1,064	6	25	112	562	225	374	50,543
June 1941	237	179	21,722	507	5,951	114	17,325	3,800	86	8,580	851	904	135	32	456	835	214	337	62,265
June 1940	126	121	13,835	533	4,374	116	11,599	2,953	67	6,239	560	902	20	30	103	558	188	209	42,533
July 1941	262	250	22,893	595	6,629	158	18,122	4,543	71	9,531	1,055	863	150	54	526	1,047	226	437	67,412
July 1940	160	153	15,805	642	4,691	121	14,296	3,261	64	7,012	718	999	78	28	77	469	248	231	49,053
August 1941	235	213	17,376	538	5,692	134	14,608	4,728	54	8,822	871	569	137	34	657	875	256	402	56,191
August 1940	111	137	16,670	587	4,679	121	11,784	3,645	34	7,209	660	647	93	30	92	469	214	290	47,472
September 1941	217	203	14,004	520	4,936	133	8,291	4,368	35	8,125	864	287	132	20	554	731	159	313	43,892
September 1940	134	131	11,218	530	3,347	134	9,502	2,973	34	6,873	626	434	99	22	74	539	206	265	37,143
October 1941	221	213	13,947	475	5,102	150	7,916	3,573	31	6,550	1,031	199	163	25	486	807	130	333	41,352
October 1940	429	247	14,793	601	3,925	137	14,349	3,065	49	7,615	842	584	103	29	108	579	172	282	47,909
November 1941	162	162	11,845	325	4,107	114	11,247	2,654	34	4,161	468	99	119	16	333	540	95	318	36,799
November 1940	156	171	14,316	458	3,990	121	14,127	3,324	62	5,283	758	627	103	37	45	568	121	177	44,444
December 1941	155	143	13,549	389	4,467	147	11,446	3,090	34	5,620	493	78	89	26	312	585	181	108	41,006
December 1940	149	135	16,093	408	4,180	134	14,525	3,285	75	5,502	630	767	94	28	122	592	107	176	47,162
Twelve Months 1941	2,510	2,294	212,797	6,077	62,925	1,611	174,024	45,703	736	92,492	9,468	7,732	1,543	400	5,078	9,271	2,031	1,709	640,697
Twelve Months 1940	1,944	1,672	185,636	6,354	54,323	1,613	159,514	38,841	760	76,833	7,736	9,528	624	341	1,206	6,468	2,291	2,249	559,150
%Change—12 Mos.	+29	+37	+15	−4	+16	.....	+9	+18	−3	+20	+23	−19	+148	+17	+320	+43	−11	−24	+15

† Does not include Federal Government deliveries which are included in other years.



KEEP 'EM ROLLING

THIRD AXLE SPECIFICATIONS

NOTES ON HEADINGS

General—(a) The capacity of the third axle (Column 2) is not to be confused with the total capacity made possible on the converted vehicle.

Column 3. The price of the unit includes the standard brakes specified in brake column and frame extensions that extend forward under the cab. Tires and brake (air or vacuum) power are not included in price nor is the cost of installation.

Column 4. Weight of third axle unit includes all appurtenances and maximum tires.

Column 15 gives brake lining area of attachment unit only.

ABBREVIATIONS:

General

‡‡—On application

**—Truxmore—Heavy cast beams (cushioned by patented spring arrangement) used in place of leaf springs

(v)—3¼x3½ (w)—3½x4½

(x)—Patented 4-wheel chain drive available for all Trucktor units

(z)—Depends upon installation

†—OPTIONAL BRAKES

Little Giant—Own or Bendix

Utility—Bendix and Lockheed

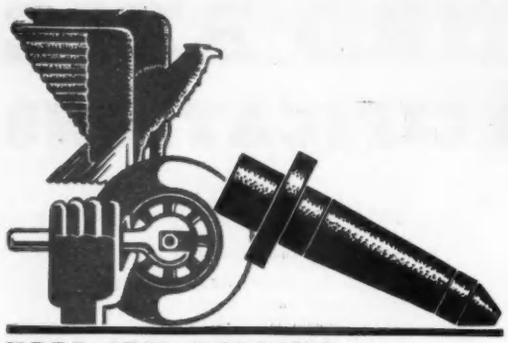
COLUMN 9
Chev—Chevrolet
Eaton
Ford—Ford
Own—Own
Shu—Shuler
Tim—Timken

COLUMN 10
D—Driving
Re—Rectangular
Sr—Solid round
Sq—Square
T—Tubular

COLUMN 13
CA—Cast Alloy Iron

COLUMN 12
B—Bendix
C—Chevrolet
F—Ford
H—Hydraulic
L—Lockheed
M—Mechanical
O—Own
V—Vacuum power

THIRD AXLE MAKE AND MODEL and Truck Model Adapted To	Capacity (Lb.) See Explanatory Notes	Price (f. o. b. factory)	Weight (Lb.) with Max. Tires, Frame Extension, Etc.	Maximum Tire Size	LOAD DISTRIBUTION RANGE (First Figure or combination applies to center axle; second figure to third axle)		Axle Spacing (with maximum tires)	AXLE DATA: Make	Type	Size	BRAKES (Standard): Make and Type	Drum Material	Brake Diameter and Width	Lining Area	Number of Points of Frame Support	Spring Size or Number Leaves Added	Spindle Diameter (at inner bearing)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Trailing Axles																	
FABCO																	
215 (Ford)	11000	490	2000	34x7	52-48	.....	44	Tim	T	4½	LH	CA	15x3½	192	2	48x2½	2¹⁵⁄₁₆
215 (Chevrolet)	11000	490	2000	34x7	52-48	.....	44	Tim	T	4½	LH	CA	16x2¼	132	2	48x2½	2¹⁵⁄₁₆
215 (All other makes)	11000	490	2000	34x7	52-48	.....	44	Tim	T	4½	LH	CA	16x3½	205	2	48x2½	2¹⁵⁄₁₆
330 (All other makes)	13000	550	3000	9.75/20	52-48	.....	48	Tim	T	4½	LH	CA	16x3½	205	2	55x3	2¹⁵⁄₁₆
LITTLE GIANT																	
6-ton (For any 1½ ton truck)	12000	308	1200	32x6	60-40	.....	42	Own	Sr	2⅝	BHV†	CA	16x2½	167	6	22x2½	2¼
8-ton (For any 1½ ton truck)	16000	488	1575	8.25/20	47-53	.....	42	Shu	Sq	2¾	BHV†	CA	16x3	167	4	42x2½	2⅝
8-ton (For any 2 ton truck)	18000	750	2000	8.25/20	50-50	.....	42	Shu	Sq	2¾	BHV†	CA	16x3½	180	4	42x3	3
10-ton (For any 2½ to 5 ton truck)	20000	890	2410	9.75/20	50-50	.....	44	Shu	Sq	3¼	BHV†	CA	17x4	250	4	44x3½	3
TRUCKTOR (x)																	
HLF (Ford 1½)	8800	480	1750	7.50/20	50-50	60-40	43	Own	Sr	3	LHV	CA	15x3½	196	6	38½x2½	2⅝
HLC (Chevrolet 1½)	8800	480	1750	7.50/20	50-50	60-40	43	Own	Sr	3	CHV	CA	16x3	219	6	38½x2½	2⅝
HLL (Light truck tires to 32x6-10 ply)	11000	575	1895	8.25/20	50-50	60-40	45	Own	Sr	3	LHV	CA	16x2¼	132	6	38½x2½	2⅝
HLS (Medium truck tires to 9.00/22)	14000	881	2285	9.00/22	50-50	60-40	48	Own	Sr	3¼	LHV	CA	16x3½	205	6	38½x3	2¾
HLR (Heavy truck tires to 9.75/22)	16000	1098	2710	9.75/22	50-50	60-40	48	Own	Sr	3½	LHV	CA	17¼x4	251	6	40x3	2¹⁵⁄₁₆
HR (Heavy duty tires to 12:00/20	21000	1282	3177	10.50/24	50-50	60-40	52	Own	Sr	4	LHV	CA	17¼x4	251	6	41½x3	3⅛
HR5 (Extra heavy duty tires)	30000	‡‡	3358	12.00/24	50-50	60-40	53½	Own	Sr	5½	LVH	CA	17¼x5½	.....	6	43½x4	3¼
TRUXMORE																	
22 (Not exc. 253 cu. in.)	10000	580	2250	7.00/20	56-44	65-35	42-43	Own	Sq	2½	LHV	CA	15x3½	200	4	**	2¹⁵⁄₁₆
26X (Not exc. 271 cu. in.)	12000	657	2500	7.50/20	54-46	65-35	44-45	Own	Sq	2¾	LHV	CA	15x3½	200	4	**	2¹⁵⁄₁₆
28	13000	790	2700	8.25/20	53-47	65-35	45-46	Own	Sq	3	LHV	CA	16x3½	210	4	**	2¹⁵⁄₁₆
32	14000	985	2900	9.00/20	53-47	65-35	46-47	Own	Sq	3	LHV	CA	16x3½	210	4	**	2¹⁵⁄₁₆
36	16000	1075	3500	10.00/20	52-48	65-35	47-48	Own	Sq	3¼	LHV	CA	17¼x4	251	4	**	3⅛
42	17000	1200	3700	11.00/20	52-48	65-35	48-50	Own	Re	(v)	LHV	CA	17¼x4	251	4	**	3⅛
50	18000	1350	4100	11.00/24	50-50	65-35	49-53	Own	Sq	3½	LHV	CA	17¼x5	350	4	**	3⅜
50X	25000	‡‡	4400	12.00/24	50-50	65-35	52-53	Own	Re	(w)	M	CA	17¼x5½	400	4	**	3½
UTILITY																	
25 (For any 1½-2 ton truck)	9000	434	1100	7.50/20	55-45	66-33	41	Own	Sq	2½	OMV†	CA	16x4	240	4	None	2¼
30 (For any 3½ ton truck)	13000	693	1600	9.00/20	55-45	66-33	44	Own	Sq	3	OMV†	CA	17x4	264	4	None	2¾
35 (For any 5 ton truck)	18000	752	1900	10.50/24	55-45	66-33	50	Own	Sq	3½	OMV†	CA	17x4	264	4	None	2⅞
300	15000	802	1560	10.50/24	55-45	66-33	44	Own	Sq	3	OMV†	CA	17x4	264	4	8	2¾
Driving Axles																	
FABCO																	
515 (Ford)	10500	1165	2400	34x7	50-50	.....	44	Tim	D	.....	FH	CA	15x3½	192	2	48x2½	2⅝
515 (Chevrolet)	10500	1165	2400	34x7	50-50	.....	44	Chev	D	.....	CH	CA	16x3	176	2	48x2½	2⅝
515 (All other makes)	10500	(z)	2400	34x7	50-50	.....	44	Match	D	.....	LH	CA	Match	(z)	2	48x2½	z
630 (All other makes)	13000	(z)	3000	9.75/20	50-50	.....	48	Match	D	.....	LH	CA	Match	(z)	2	53x3	z
THORNTON TANDEM																	
DF26F (Ford)	11000	1125	6600	34x7	50-50	.....	42	Ford	D	3¼	LH	CA	15x3½	198	4	42x2¼	2⅝
DF27FO (Ford)	11000	1125	6760	34x7	50-50	.....	42	Ford	D	3¼	LH	CA	15x3½	198	4	42x2¼	2⅝
DF29E (Ford)	12750	1250	7220	34x7	50-50	.....	42½	Eat	D	4¼	LH	CA	15x3½	198	4	42x2¼	2⅝
DF30EO (Ford)	12750	1250	7380	34x7	50-50	.....	42½	Eat	D	4¼	LH	CA	15x3½	198	4	42x2¼	2⅝
DF30E (Ford)	13500	1600	7720	34x7	50-50	.....	44	Eat	D	4¼	LH	CA	15x3½	198	4	43½x	2⅝
DF31EO (Ford)	13500	1600	7880	34x7	50-50	.....	44	Eat	D	4¼	LH	CA	15x3½	198	4	2¼	2⅝
DC26C (Chevrolet)	11000	1100	6175	34x7	50-50	.....	42	Chev	D	3½	LH	CA	16x3	218	4	42x2¼	2⅝
DC27CO (Chevrolet)	11000	1100	6690	34x7	50-50	.....	42	Chev	D	3½	LH	CA	16x3	218	4	42x2¼	2⅝
DC29T (Chevrolet)	12750	1550	6795	34x7	50-50	.....	46	Tim	D	3¾	LH	CA	16x3	218	4	46x2¼	2⅝
DC30TO (Chevrolet)	12750	1550	7310	34x7	50-50	.....	46	Tim	D	3¾	LH	CA	16x3	218	4	46x2¼	2⅝
DC30E (Chevrolet)	13500	1675	7295	34x7	50-50	.....	44	Eat	D	4¼	LH	CA	16x3	218	4	43½x	2⅝
DC31EO (Chevrolet)	13500	1675	7810	34x7	50-50	.....	44	Eat	D	4¼	LH	CA	16x3	218	4	2¼	2⅝
DD24TF (Dodge)	11000	1075	6400	34x7	50-50	.....	42	Tim	D	3⅜	LH	CA	16x3	172	4	42x2¼	2⅝
DD24TH (Dodge)	11000	1150	6870	34x7	50-50	.....	42	Tim	D	3⅜	LH	CA	16x3	172	4	42x2¼	2⅝
DD26EH (Dodge)	12750	1250	7020	34x7	50-50	.....	42½	Eat	D	4¼	LH	CA	16x2½	174	4	42x2¼	2¹⁵⁄₁₆
DD28EH (Dodge)	12750	1300	7490	34x7	50-50	.....	42½	Eat	D	4¼	LH	CA	16x2½	174	4	42x2¼	2¹⁵⁄₁₆
DD30EH (Dodge)	13350	1350	7980	34x7	50-50	.....	48	Eat	D	4½	LH	CA	16¼x3½	356	4	47½x2½	2¹⁵⁄₁₆
DD34TK (Dodge)	14000	1375	8430	900/20	50-50	.....	48	Tim	D	4½	LH	CA	17½x4	274	4	42x2¼	3¼
DD34EK (Dodge)	15000	1500	8830	900/20	50-50	.....	44	Eat	D	4¾	LH	CA	17x4	407	4	43½x2¼	3



KEEP 'EM ROLLING

DIESEL DATA

FUEL SPECIFICATIONS . . . ENGINE SPECIFICATIONS . . . . FUEL TAXES

DIESEL FUEL SPECIFICATIONS

DIESEL FUEL TRADE NAME	Cetane No.	Viscosity SSU 100 Deg. F.	Water & Sediment Max. %	Carbon Residue Max. %	Ash Max. %	Flash Min. Deg. F.	Sulphur Max. %	A.S.T.M. DISTILLATION IBP	10%	90%	End Point	Gravity	Pour Point Max. Deg. F.	AREAS OF DISTRIBUTION
American Oil Co.														
Amo-Fuel No. 2	45-50	35min.	0.05	0.1	0.01	140	0.25	360	428	581	625	30-34	0	From Maine to Florida.
Atlantic Refining Co.														
Furnace Oil Medium	.....	33-40	0.05	0.20	.....	130-160	0.5	.....	410	.....	610	.....	0	Mass., R. I., Conn., N. Y., State Barge Canal, Eastern half Penna., N. J., Del., Baltimore.
Diesel Engine Fuel Oil	45	37-41	Trace	.....	0.01	150	0.5	.....	460	650	700	30min.	0	From Philadelphia only.
Cities Service Oil Co.														
Diesel Fuel No. 1	50-55	35	Trace	0.01	0.01	150	0.25	.....	480	.....	650	.....	5	New England and Middle Atlantic states.
Diesel Fuel No. 2	50-55	37-40	0	.....	Trace	150	.....	.....	460	.....	700	36-39	−10	Central and Mid-Continent Areas.
Continental Oil Co.														
Conoco Diesel Fuel	58	35-37	None	0.1	None	150	0.15	460	495	575	600	38-40	0	Okla., Kan., Neb., Iowa, Ill., Ind., Mo., E. Minn., Wyo., Colo., Texas, Ark., La.
Conoco Diesel Fuel	62	34-36	Trace	0.15	Trace	150	0.2	380	460	530	650	39-41	15	Wyo., Mont.
Conoco Diesel Fuel	58	35-37	Trace	0.05	Trace	200	0.2	450	490	550	610	37-39	0	Texas.
Conoco Diesel Fuel	54	38-40	0.05	0.1	Trace	150	0.8	400	490	610	700	34-36	20	New Mexico, Texas.
Conoco Diesel Fuel	61	35-37	Trace	0.05	Trace	150	0.2	375	470	560	650	39-41	15	Colorado.
Conoco Diesel Fuel	60	37-39	Trace	0.2	Trace	150	1.0	470	525	630	700	35-37	10	Montana, Idaho.
Esso Marketers														
Essodiesel 208	52	36	0	Nil	0	170	0.5	400	450	580	640	.....	−0	N. E., N. Y., Pa., S. C., N. C., Va., W. Va., Tenn., La., Ark., Md., Del., D. C., N. J.
Essodiesel 210	50	38	0	0.01	0	170	0.65	380	450	645	710	.....	−0	
Phillips Petroleum Co.														
Phillips Diesel Regular	50	35-45	Trace	0.05	0	150	0.5	375	490	600	675	38-40	15	Colo., N. Mex., Western Texas.
Phillips Diesel Regular	50	35-45	Trace	0.02	0	150	0.2	350	460	630	675	38-40	0-10	Ark., Kan., Ill., Iowa, Minn., Mo., Neb., Okla.
Phillips Diesel Special	50	33-40	Trace	0.02	0	140	0.15	325	440	600	650	39-41	0	Kan., Ill., Iowa, Minn., Mo., Neb.
Phillips Diesel Light	45-50	30-32	Trace	0.01	0	125	0.15	325	410	.....	525	42-44	−20	Kan., Ill., Iowa, Minn., Mo., Neb.
Pure Oil Co.	45-55	33min.	Trace	0.03	Trace	150	0.5	325 min.	.....	.....	630	.....	0	East of Mississippi River, excluding New England, including Minnesota.
Shell Oil Co. (San Fran.)														
Dieseline	42-45	35-40	0.1	0.1	0.01	150	1.0	.....	425-475	600	.....	29min.	0-15	Cal., Ore., Wash., Nev., Ariz., Idaho, Utah, western N. Mex., Mont., Wyo.
Motor Bus Diesel Fuel	48-52	32	Trace	.....	.....	.....	0.5	.....	385	483	.....	38-44	−10	
Shell Oil Co., Inc. (N. Y.)														
"Dieseline"	48-57	35-40	0	0.03	0.01	150	1.0	.....	.....	.....	.....	30.40	0	Ark., Iowa, La., Minn., Mo., Texas and East of Mississippi River.
Sinclair Refining Co.														
155 Diesel Fuel	55	32	0	0.01	0	125	0.05	.....	385	490	555	41-43	−10	All states listed below.
250 Diesel Fuel	55	35	0	0.02	0	150	0.25	.....	440	600	625	34-40	0	Me., N. H., Vt., Conn., R. I., Mass., N. Y., N. J., Pa., Del., Md., D. C., Va., W. Va., Ala., Fla., Ga., Miss., N. C., S. C., Tenn., Ky., Okla., Ark., La., Texas, N. Mex.
346 Diesel Fuel	45	34	0	0.1	0	130	0.10	.....	410	550	640	38-40	0	Ind., Ill., Mich., Ohio, Wis., Utah, Colo., Wyo., Idaho, Iowa, Kans., Minn., Miss., Mont., Neb., N. D., S. D.
347 Diesel Fuel	50	33	0	0.1	0	130	0.5	.....	420	570	650	32-38	0	Utah, Colo., Idaho, Wyo., Iowa, Kan., Minn., Mo., Mont., Nev., Neb., N. D., S. D.
355 Diesel Fuel	50	36	0	0.2	0	150	0.25	400	450	600	675	36-39	10	Ind., Ill., Mich., Ohio, Wis., Utah, Colo., Wyo., Idaho, Iowa, Kans., Minn., Miss., Mont., Neb., N. D., S. D.
Socony-Vacuum Oil Co.														
Mobilfuel Diesel	50min.	35min.	Trace	.....	0.01	150	0.5	.....	440	600	700	.....	0	Wherever demand exists.
Standard Oil Co. of Calif.														
Standard Diesel	43-45	37-40	Trace	.....	.....	150-200	1.25	.....	425	620-675	.....	27	0-15	Cal., Ore., Wash., Idaho, Nev., Ariz., Utah.
St'd Automotive Diesel	52min.	.....	Trace	.....	.....	125-165	.....	.....	350-420	450-540	585	.....	.....	Main supply points Cal., Wash. and Oregon.
Standard Oil Co. of Ind.														
Stanolind H. S. Diesel	50	35min.	0.05	0.15	0.01	150	0.50	.....	.....	.....	675	39	0	Mich., Ind., Ill., Minn., Iowa, Mo., N. D., S. D., Kan., Mont., Wyo., Colo.
Stanolex Diesel	45	33	0.05	.....	.....	150	1.0	.....	440	570	650	34-38	0	
Standard Light Diesel	50	31	0.05	0.03	.....	125	0.15	.....	410	530	590	39-43	−25	
Sun Oil Company														
Diesel Fuel Light	50-55	33-36	0-05	0-1	Trace	125	0.15	355-380	440	620	650	34-39	5	Phila., N. J. (Atlantic City, Newark, Trenton); Wilmington, Baltimore, Providence, Bridgeport, N. Y. (N. Y. C., Newburgh, Peekskill, Syracuse, Rochester, Westchester Co).
The Texas Co.														
445 Diesel Chief	45-55	32-40	0.02	0.05	0.01	150	0.75	.....	.....	.....	.....	35-40	−30-0	Wherever demand exists.
422 Diesel Chief	45-55	30-32	0.02	0.05	0.01	140	0.50	.....	.....	.....	.....	40-45	−30	Wherever demand exists.
Tide Water Assoc. Oil Co.														
Tide Water Div. (N. Y.) Tydol No. 2	50	35	0.05	0.05	Trace	125-170	0.50	.....	440	600	645	33min.	0	N. E., N. Y., N. J., Pa., Md., D. C.
Associated Div. (Cal.) Assoc. Motor Diesel	43-45	38	Trace	0.03	Trace	150	0.75	420	480	620	720	31-34	0-15	Cal., Ore., Wash., parts of Idaho, Nev., Ariz.
Union Oil Co. of Calif.														
"Diesol"	48-50	40	Trace	0.05	Trace	150	0.75	415	485	640	720	33	20	Ariz., Idaho, Nev., Cal., Ore., Wash.
"Diesol-100"	50	33	Trace	0.05	Trace	120	0.75	345	420	550	580	39	0	Ariz., Idaho, Nev., Cal., Ore., Wash.

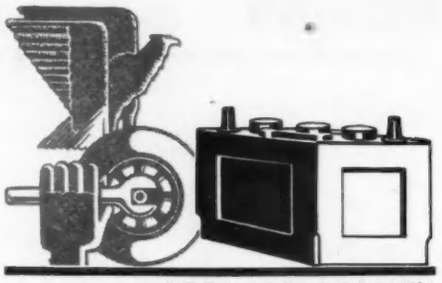
DIESEL ENGINE SPECIFICATIONS

DIESEL ENGINE MAKE AND MODEL	Type	Number of Cylinders Bore and Stroke (In.)	Cycle	Piston Displacement (Cu. In.)	HORSEPOWER: With Bare Engine — Maximum Brake Hp. at Specified R.P.M.	HORSEPOWER: With Standard Accessories — Max. Intermittent Hp. at Specified R.P.M.	HORSEPOWER: With Standard Accessories — Continuous Sustained Hp. at Specified R.P.M.	Compression Ratio - to 1	Max. Combustion Pressure (Lb. per Sq. In.)	B.M.E.P. at Continuous Hp. (Lbs. per Sq. In.)	Weight per Continuous Hp. (Lb.)	TORQUE: Max. Torque in Lb. Ft. at Specified R.P.M.	Shipping Weight (Lb.)	VALVES: Arrangement	VALVES: Intake Port Diameter and Lift (In.)	VALVES: Exhaust Port Diameter and Lift (In.)	Pressure—Nozzle Opening (Lb. per Sq. In.)	Minimum Recommended Cetane Number of Fuel	Starting Method
BUDA																			
4DT-212	AC	4–3⅝x5½	4	212	60.5-2300	49-2300	37-1800	14.50	725	77	25.7	123.5-1400	950	VI	1.37- .486	1.18- .486	2000	46	Ele
4-DT-226	AC	4–3⅝x5½	4	226	58.5-2000	48-2000	39-1800	14.50	725	76	24.3	132-1400	950	VI	1.37- .486	1.18- .486	2000	46	Ele
6-DT-278	AC	6–3⅝x4½	4	278	82-2600	69-2600	47-1800	14.50	725	74	23.5	161.8-1500	1105	VI	1.37- .486	1.18- .486	2000	46	Ele
6-DT-294	AC	6–3⅝x4¾	4	294	85-2400	71-2400	51-1800	14.50	725	76	21.9	177-1500	1115	VI	1.37- .486	1.18- .486	2000	46	Ele
6-DT-317	AC	6–3⅝x5½	4	317	90-2300	75-2300	52.5-1800	14.50	725	73	21.6	185.4-1500	1133	VI	1.37- .486	1.18- .486	2000	46	Ele
6-DT-389	AC	6–3⅞x5½	4	389	96-2100	74.5-2100	57-1600	14.20	725	73	24.5	222.5-1100	1400	VI	1.44- .476	1.31- .476	2000	46	Ele
6-DT-468	AC	6–4¼x5½	4	468	113-2000	89-2000	68-1600	14.20	725	72	21.1	268.5-1100	1435	VI	1.59- .476	1.37- .476	2000	46	Ele
6-DH-691	AC	6–4¾x6½	4	691	150-1800	123-1800	81-1200	13.70	725	77	28.0	404-1100	2270	VI	1.72- .516	1.56- .516	2000	46	Ele
CATERPILLAR																			
D-468	PC	6–4¼x5½	4	468	.....	90-1800	.....	.....	.....	92	23.5	340-800	2300	VI	.....	.....	1500	35	Ele
D-312	PC	4–4¼x5½	4	312	.....	60-1800	.....	.....	.....	84	27.8	193-1200	1670	VI	.....	.....	1500	35	Ele
CUMMINS																			
A	DI	4-4x5	4	251	.....	56.5-2200■	33-1400■	18.00	750	74	41.1	180-1200	1355	VI	1.37- .406	1.37- .406	.....	50	Ele
A	DI	6-4x5	4	377	.....	85-2200■	57-1600■	18.00	750	75	32.1	275-1200	1830	VI	1.37- .406	1.37- .406	.....	50	Ele
H	DI	4–4⅞x6	4	448	.....	83-1800	50-1200	17.00	750	74	38.6	340-800	1930	VI	1.93- .500	1.93- .500	.....	50	Ele
H	DI	6–4⅞x6	4	672	.....	125-1800	85-1400	17.00	750	72	29.9	500-800	2540	VI	1.93- .500	1.93- .500	.....	50	Ele
HS	DI	6–4⅞x6	4	672	.....	175-1800	130-1400	14.00	925	114	23.0	625-1400	3000	VI	1.93- .500	1.93- .500	.....	50	Ele
DODGE																			
T-126	AC	6–3¾x5	4	331	100-2600	.....	92.5-2600	14.75	900	87	14.4	240-1600	1338	VI	1.55- .375	1.31- .375	2000	40	Ele
GEN'L MOTORS																			
3-71	DI	3–4¼x5	2	212	.....	83-2000	62-2000	16.00	980	58	18.5	263-1000	1150	VI	No Valves	1.25- .375	1500	40	Ele
4-71	DI	4–4¼x5	2	284	.....	110-2000	83-2000	16.00	980	58	15.7	350-1000	1300	VI	No Valves	1.25- .375	1500	40	Ele
6-71	DI	6–4¼x5	2	425	.....	165-2000	123-2000	16.00	980	57	13.5	525-1000	1660	VI	No Valves	1.25- .375	1500	40	Ele
HERCULES																			
DOOB	TC	4–3¼x4½	4	199	62-2600	53-2600	41-1800	14.50	750	91	18.3♦	143-1500	750	VI	1-62- .375	1.12- .375	1650	45	E-G
DOOC	TC	4–4x4½	4	226	70-2600	60-2600	47-1800	14.50	750	91	15.9♦	162-1400	750	VI	1.62- .375	1.12- .375	1650	45	E-G
DOOD	TC	4–4¼x4½	4	255	79-2600	66-2600	53-1800	14.50	750	91	14.2♦	180-1400	750	VI	1.62- .375	1.12- .375	1650	45	E-G
DJXB	TC	6–3½x4½	4	260	77-2600	66-2600	51-1800	14.50	750	86	17.2♦	178-1400	875	VI	1.62- .375	1.12- .375	1650	45	E-G
DJXC	TC	6–3⅝x4½	4	298	83-2600	71-2600	58-1800	14.50	750	87	14.8♦	208-1500	875	VI	1.62- .375	1.12- .375	1650	45	E-G
DJXD	TC	6–4x4½	4	339	103-2600	88-2600	68-1800	14.50	750	88	12.9♦	232-1600	875	VI	1.62- .375	1.12- .375	1650	45	E-G
DWXC	TC	6–4x4¾	4	358	108-2400	92-2400	77-1800	14.50	750	95	15.8♦	265-1400	1220	VI	1.68- .395	1.25- .395	1650	45	Ele
DWXD	TC	6–4¼x4¾	4	404	122-2400	104-2400	85-1800	14.50	750	93	14.4♦	299-1400	1220	VI	1.68- .395	1.25- .395	1650	45	Ele
DRXB	TC	6–4⅜x5¼	4	474	120-2000	102-2000	89-1600	14.50	750	94	16.1♦	350-1300	1435	VI	2.00- .395	1.37- .395	1650	45	E-G
DRXC	TC	6–4⅝x5¼	4	529	133-2000	113-2000	88-1400	14.50	750	94	16.3♦	380-1400	1435	VI	2.00- .395	1.37- .395	1650	45	E-G
DHXB	TC	6–5x6	4	707	176-1800	150-1800	121-1400	14.50	750	97	20.7♦	530-1400	2500	VI	2.37- .500	1.62- .500	1650	45	E-G
DHXC	TC	6–5½x6	4	855	146-1200	124-1200	108-1000	14.50	750	100	23.1♦	675-875	2500	VI	2.37- .500	1.62- .500	1650	45	E-G
DFXB	TC	6–5x6	4	707	177-1800	150-1800	121-1400	14.50	750	97	19.8♦	530-1400	2400	VI	2.37- .500	1.62- .500	2000	45	Ele
DFXC	TC	6–5¼x6	4	779	191-1800	162-1800	133-1400	14.50	750	97	18.0♦	585-1300	2400	VI	2.37- .500	1.62- .500	2000	45	Ele
DFXD	TC	6–5½x6	4	855	193-1600	164-1600	147-1400	14.50	750	97	16.3♦	645-1350	2400	VI	2.37- .500	1.62- .500	2000	45	Ele
DFXE	TC	6–5½x6	4	895	200-1600	171-1600	153-1400	14.50	750	97	15.7♦	635-1200	2400	VI	2.37- .500	1.62- .500	2000	45	Ele
WAUKESHA																			
6BKH	DI	6–3¾x4¼	4	282	83-2800	54-2500	41.5-1800	6.40	500	65	23.5	174-1400	975	VI	1.62- .375	1.25- .375	750	....	E-H
140HS	DI	6–4¼x5½	4	468	111-2250	95-2250	65-1500	5.80	500	73	23.2	342-1000	1510	VI	1.87- .531	1.37- .469	750	....	Ele
140HK	DI	6–4½x5½	4	525	124-2250	109-2250	74-1500	5.80	500	74	21.0	383-1000	1550	VI	1.87- .531	1.37- .469	750	....	Ele
145HS	DI	6–4¾x6	4	638	143-2000	121-2000	86-1400	5.60	500	76	21.3	450-900	1835	VI	1.87- .594	1.37- .531	750	....	Ele
145HK	DI	6–5¼x6	4	779	174-2000	148-2000	106-1400	5.60	500	77	17.6	550-900	1865	VI	1.87- .594	1.37- .531	750	....	Ele

■—Without fan or muffler
AC—Air Chamber
DI—Direct Ignition
E-G—Electric or Auxilliary Gasoline Engine
E-H—Electric or Hand
Ele—Electric
LE—Lanova Energy Cell
PC—Precumbustion Chamber
TC—Turbulence Chamber
VI—Vertically In-head
♦Based on automotive or industrial weight

DIESEL FUEL TAXES

STATE	State Gasoline Tax	State Diesel Fuel Tax	DIESEL FUEL TAX REMARKS
Alabama	6	6	Same if used in motor vehicles on highways.
Arizona	5	5	Collected by seller.
Arkansas	6½	6½	Paid on use basis by operator when used on the highways.
California	3	3	Same as gasoline tax.
Colorado	4	4	Same as gasoline if for use on highways.
Connecticut	3	3	Collected by distributor.
Delaware	4	4	Same. Diesels pay twice the registration fee.
Dist. of Col.	3	3	When used in equipment on the highways or intended to be used thereon.
Florida	7	7	Diesel tax made effective July 1, 1939.
Georgia	6	6	Same if used in motor vehicles on highways.
Idaho	5.1	5.1	Collected through oil companies.
Illinois	3	3	Collected from licensed distributor and user direct.
Indiana	4	4	Tax paid on sales basis if used on the highways.
Iowa	3	3	Same as gasoline tax if used on highways.
Kansas	3	3	Paid by user if used in motor vehicles on highways.
Kentucky	5	5	Paid by user if used in motor vehicles on highways.
Louisiana	7	7	Paid by user if used in motor vehicles on highways.
Maine	4	4	Paid by user if used in motor vehicles on highways.
Maryland	4	4	Same as gasoline tax.
Massachusetts	3	No	Diesels pay higher registration fee.
Michigan	3	3	Collected by wholesale distributor.
Minnesota	4	4	Tax paid on declaration of use by licensed user.
Mississippi	6	6	Same if used in motor vehicles on highways.
Missouri	2	2	Same if used in motor vehicles on highways.
Montana	5	5	Paid by user if used in motor vehicles on highways.
Nebraska	5	No	In addition to regular truck registration fee, diesel vehicles pay a special fee amounting to twice registration fee.
Nevada	4	5	Increase made effective July 1, 1939.
New Hampshire	4	4	Same as gasoline tax.
New Jersey	3	3	Same as gasoline tax.
New Mexico	5	5	Collected from licensed and bonded user direct.
New York	4	4	Same as gasoline tax.
North Carolina	6	6	Same as gasoline tax.
North Dakota	4	4	Same as gasoline tax.
Ohio	4	4	Same as gasoline tax.
Oklahoma	5½	5½	Same if used in motor vehicles on highways.
Oregon	5	5	Diesels also charged higher license fee—Trucks $1.50 per 100 lb. light weight.
Pennsylvania	4	4	Diesel fuel taxable only if used in motor vehicles on highways.
Rhode Island	3	3	Same as gasoline tax.
South Carolina	6	6	Diesel fuel taxed by Act of 1940.
South Dakota	4	4	Paid by user if used in motor vehicles on highways.
Tennessee	7	7	Paid by user if used in motor vehicles on highways.
Texas	4	4	Same as gasoline tax.
Utah	4	4	Paid by user if used in motor vehicles on the highways.
Vermont	4	No	Diesel vehicles charged twice the registration fee.
Virginia	5	5	Collected from licensed "User-Sellers" and "Users" direct.
Washington	5	5	Diesels also pay 25% capacity license fee on gross weight.
West Virginia	5	5	Same as gasoline when used on highways.
Wisconsin	4	4	Same as gasoline tax.
Wyoming	4	4	Same as gasoline tax when used on highways.
FEDERAL	1	No	No tax collected at present.



BATTERY DATA

BATTERY TYPE AND CAPACITY BY

TRUCK MAKE AND MODEL	BATTERY Amp. Hr. Capacity	Number of Plates	Terminal Grounded
AUTOCAR			
A, B, UA, UB, C10, U10, C20, U20, C30, U30	118	15	P
RM, RL, D, UD, UDD	135	17	P
DF, N, NF, DH, DS	152	19	P
UDF, UN, UNF, US	152	19	P
UT, 5UTR, 6X2UT, T, C, 6X2UT	135*	17	P
RMT, 1TR, 6X2RL, 1UTR, 6X2UD	118*	15	P
2TR, 3TR, 4TR	135*	17	P
2UTR, 3UTR, 4UTR	135*	17	P
RLD, DP, C40, C40D, U40, U40D	135	17	P
6X2DF, 6X2NF, 6X4DF	135*	17	P
6X2T, 6X4TO, 6X4TD, 6X4TC, 6X4S	135*	17	P
6X2UN, 6X2UNF, 6X4UTO, 6X4UTD	135*	17	P
4X4DF, 4X4N, 4X4NF	152	19	P
C10, U10, C20, U20, C30, U30	118	15	P
C10T, U10T, C20T, U20T, C30T, U30T	101*	13	P
DC10, DC10T, DU10, DU10T, DC20, DC20T, DU20, DU20T	135**	17	P
C40, U40, C40D, U40D, C50D	135	17	P
C40T, U40T, C4062, C4064, U4064, C50T	118*	15	P
DC50T	237*	25	P
C60, U60, U60D, C70, U70, C70D, C7044, 380, U80, C80D, U80D	152	19	P
C60T, U60T, C70T, U70T, C7062, U7062, C7064, U7064, C80T, U80T, C8044, C8062, U8062, C8064, U8064, C90, U90, C90T, U90T, C90D, U90D, C9044, C9062, U9062, C9064, U9064	135*	17	P
DC100T, DU100T, DC100D, DC10044, DC10062, DU10062, DC10064, DU10064	152**	19	P
BROCKWAY			
78, 83, 88, 92, 94	118	15	P
112, 128, 146, 147, 152, 153, 154, 156, 162, 166	135	17	P
160X, 165X	135	17	P
170X, 175X, 195X, 220X	152	19	P
240X, 260X	118*	15	P
CHEVROLET			
All Trucks (1935-36)	90	15	N
(1937-38)	94	15	N
(1939)	95	15	N
(1940-42)	100	15	N
CORBITT			
12B, 13B, F12, 17B, F14, 14BT, 21B	101	13	P
26D, F23, F27, F35, 18BT, 22BT, 27BT	101	13	P
F18	101	17	P
DIAMOND T			
201 (Stud.)	95	15	P
201 (Deluxe), 201C, 306, 306SC, 404, 404C, 404SC	100	15	P
DIAMOND T—(Cont.)			
406	110	17	P
509, 509C, 612, 612C, 614, 614C	118	15	P
702, 702C, 805, 805C, 806, 806C	152	19	P
900	200	25	P
DODGE			
RC, RD, TC, TD, VC, WC Series	90	13	P
RE, VD, TE, WD Series	95	15	P
RF, VF, WF, WFM Series	105	15	P
RG, RH, TG, TH, VG, VH, WG, WH, WGM, WHM Series	119	15	P
RL, RK, RO, RP, TL, TK, VL, VK, WL, WK Series	136	17	P
TLD, TKD, VLD, VKD, WLD, WKD	153**	19	P
WC (1942)	90	13	P
WD (1942)	95	15	P
WF, WFM (1942)	105	15	P
WG, WH, WGM, WHM (1942)	119	15	P
WL, WK (1942)	136	17	P
WLD, WKD (1942)	136**	17	P
FEDERAL			
7, 8, 9, 10, 11, 11H, 12, 14	100	13	P
15, 15H, 18H, 20H, 75	100	13	P
16, 17, 18, 20, 76, 77, 80	118	15	P
18, 20 (Late 1941)	135	17	P
25, 29, 25H, 29H, 35, 45	135	17	P
40, 40DR, 50, 50H	135	17	P
62, 63, 65, 66 (12-volt)	135*	17	P
C7, C7W, C8, C8W, C8H	135	17	P
75, 80, 75H, 80H	100	13	P
85, 89, 85H, 89H, 90, 92, 94	135	17	P
FORD			
(1939)	100	17	P
(1940-42)	120	17	P
FWD			
HS, HG, HM, SUA, SU, YU, HA, HR, M6, CU, CUA, T26, T30, T32, MJ6, M7, M10, MJ6X6, M6X6	153	19	P
GENERAL MOTORS			
AC100 to 450 (1940)	100	15	P
AF300 to 450 (1940)	100	15	P
AF240 (1941-42)	86	13	P
CC100 to 450 (1941-42)	100	15	P
CF300 to 450 (1941-42)	100	15	P
AC500 and up (1939-42)	115	17	P
AF500 and up (1939-42)	115	17	P
ADC 500 and up (12-volt)	280	25	P
ADF500 and up (12-volt)	200*	25	P
HUG			
98, 99, 99S, 44-4, 45-4, 46-4	153	19	N
D42, D43, D43L, D98, D99, D99S, 42W, 87W, CB8P	153	19	N
15W, 19W, 83W, 85W, CB6P, CB7P	105	19	N
INTERNATIONAL			
K1, K2, K3, K4, KS4, K5, KS5, K5COE, KS5COE (1941-42)	105	15	P
K6, KS6, K6T, KS6T, K6F, K7, KS7, K7COE, KS7COE (1941-42)	127	15	P
K8, KS8, K8COE, KS8COE, K8T, KR8, KR8COE, KR8T, KS8T, K8F, K10, KR10, KS10, KR11, KS11, KR11COE, KS11COE, KR11T, KS11T, K11F, KR12F (1941-42)	145	17	P
KENWORTH			
505 to 512, 514, 515, 516, 519 to 524, 548, 550 to 556 (1941-42)	150*	21	P
513, 533 to 540 (1941-42)	135	19	P
525 to 528, 541 to 546 (1941-42)	150	21	P
LA FRANCE-REPUBLIC			
All Models (1941-42)	158	23	P
MARMON-HERRINGTON			
E5, E6, LD2, OT1, F5-4, F6-4, FF5-4, FF6-4, F5-6, F6-6, FF5-6, FF6-6, H5-4, H6-4, HH5-4, HH6-4, H5-6, H6-6, HH5-6, HH6-6, J5-4, J6-4, JJ5-4, JJ6-4, JJ5-6, JJ6-6, LD3-4, LLD3-4, LD4-4, LLD4-4, LD5-4, LLD5-4, OT2-4, OT3-4, OOT3-4, OT4-4, OOT4-4	100	17	P
C10-4, C20-4, C30-4, DSD100-4, DSD-200-4, DSD200-6, DSD300-4, DSD-300-6	120	17	P
C40-4, C50-4, DSD400-4, DSD400-6, DSD500-4, DSD500-6	141	17	P
C55-4, C55DR-4, C60-4, C60-6, C70-4, C70-6, DSD500-4, DSD550-DR4, DSD600-4, DSD600-6, DSD700-4, DSD700-6	116	15	P
C80-4, C80-6, DSD800-4, DSD800-6	120	13	P
DSD900-4, DSD900-6, DSD1000-4, DSD1000-6	138	15	P
OSHKOSH			
W900	24	25	P
All Other Models	120	17	P
REO			
450, 450L, 475, 475L, 650, 650L, 675, 675L, 1A4, 1C4	90	13	N
1A4H, 1C4H, 1B7M, 2B7M	90	13	N

BATTERY MAINTENANCE TIPS

FLEET operators may expect trouble-free service from their batteries if they follow four simple rules. These are:

1. Maintain battery in a healthy state of charge by keeping regulator in adjustment.
2. Add water at regular intervals.
3. Keep battery clean outside.
4. Keep a written record of the battery service.

1. A high charging rate to a charged battery causes the battery to gas and overheat. With these conditions the battery requires frequent additions of water, and battery life is shortened.

To avoid this, the charging rate to the battery must be reduced as the battery approaches charge. A properly adjusted voltage regulator will limit the charging as the battery becomes charged. This is due to the fact that the opposition of the battery to the charging current increases as the battery comes up to charge. A constant voltage is less able to overcome the growing opposition and force a charge into the battery. Therefore, it is necessary to check the voltage regulator and keep it in adjustment to obtain good battery life.

The current regulator, which protects the generator from overload by limiting its output to a safe value, should always be checked along with the voltage regulator.

2. The interval between water additions depends entirely on the operation mileage and service of each vehicle. Regular inspection of the battery should be made at the same time as other routine inspections.

The water to be added should be distilled or should be otherwise approved. By approved water is meant that which the battery manufacturer has analyzed and found safe for use. Most manufacturers offer this service free of charge to their customers.

Nothing but water should be added to the battery. The addition of special powders or solutions is often injurious, having a corrosive or rotting action on the plates, re-

TRUCK MODELS

TRUCK MAKE AND MODEL	BATTERY		
	Amp. Hr. Capacity	Number of Plates	Terminal Grounded
REO—(Cont.)			
1B4, 1D4, 1B4H, 1D4H, 2B4, 2D4, 2B4, 2D4, SJ5, 2H5, 1L5	90	13	N
2LM7, 2LMH7	240	25	N
	140	15	N
2L4, 2L4H, 2LC4	240	25	N
	140	15	N
19, 20	90	13	N
21, 22, 23	136	17	N
4D19	204	25	P
6D19, D20	272*	33	P
23H, 25	170	21	N
27	133	15	N
STERLING			
MB75, MB85, MC87, MB90, MC96, JB90, HD105, HD110, JD135, JD137, HD145, HD165, HC105, HC115, JC115, JC137, HC144, JC145, HC145, HC147, HC156, HC185	158	23	P
HD175, HC175	170*	21	P
STEWART			
40A, 60A, 61A, 62A, 47A, 50A	117	15	P
38A, 49A, 51A, 58A, 59A	133	17	P
STUDEBAKER			
K5, L5, K10, K15, K15M	105	15	P
K20, K20M, K25, K25M	136	17	P
K20D	136**	17	P
K30, K30M	153	19	P
All Models (1941-42)	90	13	P
WALTER			
FN, FM (1940-42)	160	17	P
FKM, FC, FCK, FB, FBR (1940-42)	120*	15	P
FXB, FXR (1940-42)	160*	17	P
WHITE			
700, 704, 800, 802, 706, 510	105	15	P
704K	115	15	P
709, 710, 712	117	15	P
718	100	13	P
750, 750T	133	17	P
720, 720T, 820	136	17	P
722	114	13	P
805, 809, 810, 812, 818	117	15	P
WA14, WA18, WA20, WA22, WA26, WA34, WA114, WA118, WA120, WA122, WA126, WA134, WA2064, WA2264	119	15	P
White Horse	120	17	P
WA16	120	13	P
WILLYS			
All Models	80	13	N

ABBREVIATIONS:
* Each for 2 units. ** Each for 4 units.
N—Negative. P—Positive.

ducing the capacity and voltage of the cells.

The time for filling the battery is important only during cold or freezing weather. It is best to add water just before the vehicle starts its run so that the charge the battery receives will mix the water with the electrolyte. Water should never be added to a battery and the battery left standing in freezing temperature, the water in this case will freeze just the same as though it was outside the battery. All cells should require approximately the same amount of water at refill. If one cell requires more water than the others, examine the battery

(CONTINUED ON PAGE 195)

FAST CHARGER SPECIFICATIONS

Name	Model	Price	Type	Timing Device	Cut-Off Switch	Charging Rate	Ammeter to Show Rate of Charge	Voltmeter to Show Battery Voltage	Battery Volts	Rate of Charge at Start	Rate of Charge at Finish	Available in What Voltages	Available in What Cycles
Allen Electric & Equip. Co.													
Allen	F100	177.50	CS	M	Au	Ad	Y	Y	6	100 Max.	80	110,220	25,30,50,60
Allen	F50	87.50	CS	N	M	Ad	Y	Y	6	50 Max.	40	110,220	25,30,50,60
Allen	F51	96.50	CS	M	Au	Ad	Y	Y	6	50 Max.	40	110,220	25,30,50,60
Baldor Electric Co.													
Handy Rect-O-Lyzr	90	210.00	B	M	Au	Ad	Y	Y	6	80–90	15–20	115,230	50,60
Handy Battery Booster	30	89.50	B	M	Au	F	Y	Y	6 & 12	17–34	15–32	115,230	50,60
Benwood Linze Co.													
B-L	200	219.50	CO	M	Au	Ad	Y	Y	6	100 Max.	12–15	110	60
B-L	201	225.00	CO	M	Au	Ad	Y	Y	6	100 Max.	12–15	220	60
B-L	250–12	400.00	CO	M	Au	Ad	Y	Y	6 & 12	100 Max.	12–15	220	60
Electra Mfg. Co.													
Dynamic	C100	199.50	CS	M	Au	Ad	Y	Y-3	6	100	60	110,220	50–60
Dynamic	DX100	249.50	CS	M	Au	Ad	Y	Y-3	6	100	60	110,220	50–60
Electric Heat Control Co.													
King	FC-3	187.50	CS	M	Au	Ad	Y	Y	6	100 Max.	60	110,220	60
W. D. Foreman													
Foreman Batt. Booster*	A-6	147.50	MG	M	Au	F	Y	N	6	75	55	All	All
Foreman Batt. Booster*	D-6	176.50	MG	M	Au	F	Y	N	6	75	55	All	All
Foreman Batt. Booster*	A-12	157.50	MG	M	Au	F	Y	N	12	45	30	All	All
Foreman Batt. Booster*	D-12	186.50	MG	M	Au	F	Y	N	12	45	40	All	All
Foreman Batt. Booster*	A2-12	207.50	MG	M	Au	F	Y	N	12	75	55	All	All
Foreman Batt. Booster*	D2-12	236.50	MG	M	Au	F	Y	N	12	75	55	All	All
General Electric Co.													
GE	Deluxe Eighty-Deluxe	249.50	CO	E	Au	Ad	Y	Y	6	100	15	110,220	60
GE		189.50	CO	E	Au	Ad	Y	Y		80	20	110,220	60
GE	Eighty	159.50	CO	E	Au	Ad	Y	Y	6	80	30–70	110,220	60
GE	Booster	89.50	B	M	Au	F	Y	N	6	40	35–40	110,220	60
Hunter Hartman Corp.**													
KwiKurent Deluxe	372K2	395.00	MG	M	Au	Ad	Y	Y	6	130 Max.	70	110,220,440	Any cycle
KwiKurent Standard	365K	355.00	MG	M		Ad	Y	Y	6	130 Max.	70	110 220 440	Any cycle
Rocket Imp.	472R	265.00	CO	M	Au	Ad	Y	Y	6	100 Max.	65	110,220	25,50,60
Bullet	365B	159.00	CS	M	Au	Ad	Y	Y	6	100 Max.	60	110	60
Torpedo	T100	210.00	CS	M	Au	Ad	Y	Y	6	100 Max.	60	110	25,50,60
Rocket Spec.	RS101	225.00	CS	M	Au	Ad	Y	Y	6	100 Max.	60	110	
Rocket Spec.	RS100	235.00	CO	M	Au	Ad	Y	Y	6	100 Max.	65	110,220	25,50,60
Marquette Mfg. Co.													
Marquette-Hi-Rate	170	210.00	CO	M	Au	Ad	Y	Y		100 Max.	60–70	110,220	40,50,60
Marquette Hi-Rate	171	179.50	CO	M	Au	Ad	Y	Y		80 Max.	50–60	110,220	40,50,60
McColpin-Christie Corp. Ltd.													
Charg-A-Lyzer	Q1	185.00	CS	M	Au	Ad	Y	Y	6	80	60	110,220	25,50,60
Charg-A-Lyzer	QD	209.00	CS	M	Au	Ad	Y	Y	6	80	60	110,220	25,50,60
Charg-A-Lyzer	Q3	256.00	CS	M	Au	Ad	Y	Y	12	80	60	220	50,60
Charg-A-Lyzer	QD3	280.00	CS	M	Au	Ad	Y	Y	12	80	60	220	50,60
Charg-A-Lyzer	Q4	274.00	CS	M	Au	Ad	Y	Y	6 & 12	80	60	220	50,60
Charg-A-Lyzer	QD4	298.00	CS	M	Au	Ad	Y	Y	6 & 12	80	60	220	56,60
Power Booster	PB	53.00	CS	M	Au	Ad	Y	N	6	28	20	110,220	25,50,60
Power Booster	PC	53.00	CS	M	Au	Ad	Y	N	12	14	10	110,220	25,50,60
Mercury Corp.													
Mercury	Master	312.50	SE	M	Au	Ad	Y	Y-3	6	115 Max.	60	110,220	25,50,60
Mercury	D-250	265.00	SE	M	Au	Ad	Y	Y-3	6	90 Max.	40	110,220	25,50,60
Mercury	N-100	219.75	CS	M	Au	Ad	Y	Y	6	90 Max.	50	110,220	25,50,60
Mercury	Cub-80	105.00	CS	M	Au	Ad	Y	Y	6	80 Max.	40	110	60
Mercury-Victor	D-500	565.00	SE	M	Au	Ad	Y	Y	6 & 12	100–150	60	110,220	25,50,60
National Battery Co.													
Speedway	115	197.50	CO	M	Au	Ad	Y	Y	6	100 Max.	80	110,220	60
Speedway	114	179.50	CO	M	Au	Ad	Y	Y	6	80 Max.	60	110,220	60
Quick Charge, Inc.													
Quick Charge	Quickie Eighty	119.95	CS	M	Au	F	Y	Y	6	80 Max.	50–60	115	60,50
Quick Charge	80AD	198.50	CS	M	Au	Ad	Y	Y	6	100	60–70	115,220	50,60
Quick Charge	80ADW	204.50	CS	M	Au	Ad	Y	Y	6	100	60–70	115,220	50,60
Quick Charge	80ADW	298.50	CS	M	Au	Ad	Y	Y	6 & 12	80	50–60	220	50,60
Quick Charge	80ADW	323.50	CO	M	Au	Ad	Y	Y	6 & 12	80	50–60	115	50,60
Joseph Weidenhoff, Inc.													
Weidenhoff	555	186.50	CS	M	Au	Ad	Y	Y	6	80 Max.	25–30	110,220	50,60

** Gas powered generator models also available.
* Chargers can be supplied with voltmeters, with gasoline motor power, and for 12- or 24-volt batteries either electric or gasoline powered, at extra cost.

Ad—Adjustable **B**—Bulb **CS**—Copper Sulphide **F**—Fixed **MG** Motor Generator **SE**—Selenium
Au—Automatic **CO**—Copper Oxide **E**—Electrical **M**—Mechanical **N**—No **Y**—Yes

SAFETY RULES FOR CHANGING TIRES

In changing tires many serious accidents have resulted from truck tire locking-rings blowing off. Mechanics and drivers called upon to change tires should make sure, first, that the lock-ring is not defective or sprung too much, and second, that it is properly fitted and secured before applying air. There is a great probability that serious accident will result if the proper procedure for changing and inflation is not carefully followed.

In order that accidents may be prevented, the following set of safety rules has been compiled by the Rubber Manufacturers Association:

1. Examine all locking-rings and rims to determine condition; those found defective should be replaced.

2. Deflate tires before removing or replacing locking-rings.

3. Place locking-rings firmly in position before inflating tire.

4. Inflate to a pressure of only five or ten pounds to form tire properly. Tap locking-ring lightly all around, to make sure that the tongue-and-groove sections of the ring and base are in alignment.

5. Increase air pressure five or ten pounds, then again tap ring lightly to be sure the rin remains properly seated.

6. Before inflating tire further, place tire with locking-ring down or facing away from workman. Extend the air hose through the side of tire with the fixed rim, and inflate to proper pressure.

7. Tires should not be overinflated; manufacturers' designated pressure should be observed.

8. Keep all tools in good condition.

9. Clean rust and corrosion from rims and lock-ring before reapplying the tire.

10. Never remove an outside dual for servicing while inside dual is inflated without making sure inside tire and rim are in perfectly normal and safe alignment. If mud and dirt obscure the flange and lack-ring, the inner dual should be deflated before loosening the wheel lugs.

11. Safest inflation practice is to use a clip on the air chuck, which permits the service man to move away from the tire. A chuck type gauge about six feet from the end of the air hose will permit testing of air without being in danger zone.

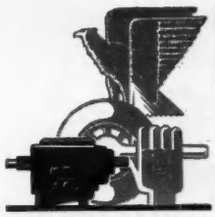
TRANSMISSION

TRANSMISSION MAKE AND MODEL	Torque Rating	No. of Forward Speeds	Location	Type	GEAR RATIOS											Weight—Dry (Lb.)	Oil Capacity (Pts.)	Power Take-off Opening
					Direct Drive On	Low	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Reverse	Overdrive			
AUTOCAR																		
RL, URL	350	5	Eng	Con	4	6.07	3.51	1.77	1.00	.78				7.80	.78	332	11	Yes
DF	350	5	Eng	Con	4	5.78	3.52	1.83	1.00	.72				7.23	.72	335	11	Yes
TF	450	5	Eng	Con	4	5.90	3.60	1.84	1.00	.75				7.37	.75	416	11	Yes
A-2	....	2	Eng	....	2	1.47	1.00									310	10	Yes
A-3	....	....	....	....	....	1.98	1.00								.725	298	10	Yes
BROWN-LIPE (1)																		
2321	....	2	Ams	Con	....	1.00	....	....	....	....	....	....	....	....	.75	105	4	Yes
2323	....	2	Ams	Con	2	1.58	1.00	....	....	....	....	....	....	....	....	105	4	Yes
3221	....	2	Ams	Con	....	1.00	....	....	....	....	....	....	....	....	.79	133	7	No
3222	....	2	Ams	Con	2	2.15	1.00	....	....	....	....	....	....	....	....	133	7	No
5222	....	2	Ams	Con	2	2.34	1.00	....	....	....	....	....	....	....	....	190	8	No
5531	....	3	Ams	Con	2	2.00	1.00	....	....	....	....	....	....	....	.72	145	7	Yes
6031	....	3	Ams	Con	2	2.14	1.00	....	....	....	....	....	....	....	.69	210	8	Yes
703	....	3	Ams	Cla	2	2.62	1.00	....	....	....	....	....	....	....	.747	355	8½	Yes
2341	....	4	Eng	CC	4	6.34	3.28	1.65	1.00	....	....	....	....	7.92	....	138	5½	Yes
2541	....	4	Eng	CC	4	6.34	3.28	1.65	1.00	....	....	....	....	7.92	....	138	5½	Yes
3341	....	4	Eng	CC	4	6.30	3.51	1.68	1.00	....	....	....	....	7.29	....	230	8½	Yes
3440	....	4	Eng	CC	3	3.87	1.88	1.00	....	....	....	....	....	4.48	.73	230	8½	Yes
5341	....	4	Eng	CC	4	6.63	3.20	1.70	1.00	....	....	....	....	7.53	....	327	8	Yes
6241	....	4	Eng	CC	4	6.63	3.19	1.70	1.00	....	....	....	....	7.53	....	342	8	Yes
6440	....	4	Eng	CC	3	3.90	1.88	1.00	....	....	....	....	....	4.43	.75	342	8	Yes
7741	....	4	Eng	CC	4	6.27	3.46	1.73	1.00	....	....	....	....	8.15	....	479	18	Yes
7841	....	4	Eng	CC	4	5.24	2.89	1.71	1.00	....	....	....	....	6.81	....	479	18	Yes
7840	....	4	Eng	CC	3	3.72	2.06	1.00	....	....	....	....	....	4.84	.77	479	18	Yes
2452	....	5	Eng	CC	5	7.12	4.20	2.33	1.66	1.00	....	....	....	7.45	....	175	9	Yes
2453	....	5	Eng	CC	4	6.12	3.62	2.00	1.00	....	....	....	....	6.40	.79	175	9	Yes
3352	....	5	Eng	CC	5	7.93	4.58	2.47	1.46	1.00	....	....	....	7.93	....	290	10	Yes
3353	....	5	Eng	CC	4	6.54	3.77	1.92	1.00	....	....	....	....	6.54	.77	290	10	Yes
5351	....	5	Eng	CC	4	6.63	3.20	1.70	1.00	....	....	....	....	7.53	.74	420	12	Yes
5352	....	5	Eng	CC	5	7.70	4.85	2.56	1.43	1.00	....	....	....	7.80	....	420	12	Yes
7751	....	5	Eng	CC	4	6.27	3.46	1.73	1.00	....	....	....	....	8.15	.67	587	26	Yes
7851	....	5	Eng	CC	4	5.24	2.89	1.71	1.00	....	....	....	....	6.81	.69	587	26	Yes
3481	....	8	Eng	CC	7	8.31	4.00	3.87	2.15	1.86	1.57	1.00	....	(a)	.73	375	11	Yes
7881	....	8	Eng	CC	7	8.48	4.70	3.72	2.28	2.06	1.76	1.00	....	(b)	.77	680	26	Yes
CHEVROLET																		
1942—½ & ¾ Ton	200	3	Eng	SC	3	2.94	1.68	1.00	....	....	....	....	....	2.94	....	48	1½	No
1942—1 & 1½ Ton	200	4	Eng	Cla	4	7.06	3.48	1.71	1.00	....	....	....	....	6.98	....	90	5½	Yes
CLARK																		
141-T	Var	3	Eng	CC	3	3.46	1.71	1.00	....	....	....	....	....	4.25	....	85	3½	Yes
170FS	Var	4	Eng	Cla	4	6.57	3.58	1.73	1.00	....	....	....	....	7.88	....	140	8	Yes
185-F	Var	4	Eng	CC	4	6.35	3.31	1.73	1.00	....	....	....	....	7.54	....	140	8	Yes
186-F	Var	4	Eng	CC	4	6.35	3.31	2.40	1.00	....	....	....	....	7.54	....	140	8	Yes
187-F	Var	4	Eng	CC	4	5.00	2.61	1.89	1.00	....	....	....	....	5.94	....	140	8	Yes
200-V	Var	5	Eng	CC	5	7.58	4.38	2.40	1.48	1.00	....	....	....	6.11	....	200	12	Yes
200-VO	Var	5	Eng	CC	4	6.06	3.50	1.91	1.00	....	....	....	....	4.87	.799	200	12	Yes
190-T	Var	3	Eng	CC	3	3.90	1.84	1.00	....	....	....	....	....	4.38	....	120	7	No
191-T	Var	3	Eng	CC‡	....	4.13	1.95	1.06	....	....	....	....	....	4.65	....	200	8	No
205-V	Var	5	Eng	CC	5	7.58	4.38	2.40	1.48	1.00	....	....	....	7.51	....	205	12	Yes
205-VO	Var	5	Eng	CC	4	6.06	3.50	1.91	1.00	....	....	....	....	6.00	.799	205	12	Yes
230-F	Var	4	Eng	CC	4	5.00	3.07	1.71	1.00	....	....	....	....	5.83	....	195	11	Yes
204-V	Var	5	Eng	CC	5	7.58	4.38	3.05	1.72	1.00	....	....	....	7.51	....	205	12	Yes
270-V	Var	5	Eng	CC	5	7.88	4.46	2.63	1.48	1.00	....	....	....	7.88	....	290	20	Yes
270-VO	Var	5	Eng	CC	4	7.00	3.97	1.90	1.00	....	....	....	....	7.00	.788	290	20	Yes
326-V	Var	5	Eng	CC	5	8.05	.434	2.80	1.67	1.00	....	....	....	8.05	....	380	24	Yes
326-VO	Var	5	Eng	CC	4	7.08	3.82	1.85	1.00	....	....	....	....	7.08	.768	380	24	Yes
204-VO	Var	5	Eng	CC	4	6.06	3.50	1.80	1.00	....	....	....	....	6.00	.799	205	12	Yes
231-F	Var	4	Eng	CC	4	6.35	3.90	1.97	1.00	....	....	....	....	7.41	....	195	11	Yes
330-F	Var	4	Eng	CC	4	4.88	3.09	1.73	1.00	....	....	....	....	4.06	....	200	10	No
330-FO	Var	4	Eng	CC	3	4.35	1.90	1.00	....	....	....	....	....	3.62	.788	300	10	No
331-F	Var	4	Eng	CC‡	....	5.08	3.21	1.80	1.04	....	....	....	....	4.22	....	420	14	No
331-FO	Var	4	Eng	CC‡	....	4.53	1.98	1.04	....	....	....	....	....	3.77	.820	420	14	No
333-VO	Var	5	Eng	CC‡	....	4.64	2.94	1.73	.96	....	....	....	....	3.96	.750	475	18	No
FORD																		
Used on 11D, 11Y, IND, INY, 191W, 118T, 198T 19T, 11W, 19W, 111W	....	4	Eng	Cla	4	6.40	2.09	1.69	1.00	....	....	....	....	7.82	....	....	5	Yes
Used on 11D, 11Y, INC	....	3	....	SC	3	3.53	1.90	1.00	....	....	....	....	....	4.00	....	....	2½	No
Used on 11C	....	3	....	Con	3	2.82	1.60	1.00	....	....	....	....	....	3.62	....	....	2½	No

ABBREVIATIONS:

*—Includes transfer
†—With clutch housing and brake band assemblies
‡—Indicates angle drive
§—With brake band assembly, companion flange, brake drum and lever
(1)—Spicer Manufacturing Co.
(a)—9.62 and 4.48 to 1
(b)—11.04 and 4.84 to 1
(d)—10.03 and 4.78 to 1
(e)—8.00 and 4.71 to 1
(f)—6.50 and 3.33 to 1
(g)—8.12 and 4.74 to 1

SPECIFICATIONS



KEEP 'EM ROLLING

TRANSMISSION MAKE AND MODEL	Torque Rating	No. of Forward Speeds	Location	Type	GEAR RATIOS										Weight—Dry (Lb.)	Oil Capacity (Pts.)	Power Take-off Opening
					Direct Drive On	Low	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Reverse	Overdrive			
F. W. D.																		
U	Var	5	Ams	Con	5	9.95	5.83	3.15	1.85	1.00				8.97	....	966*	32	Yes
S	Var	5	Ams	Con	5	9.95	5.83	3.15	1.85	1.00				8.97	....	966*	32	Yes
M	Var	10	Ams	Con	10	15.33	9.28	5.73	3.08	2.10	7.30	4.42	2.73	(d)	....	1638*	28	Yes
FULLER																		
AR-163	Var	2	Ams	CC	2	1.63	1.00							None	....	120	8	No
UR-163	Var	2	Eng	CC	2	1.63	1.00							None	....	152	8	No
2-A-62	Var	2	Ams	Con	2	1.58	1.00							None	....	165	8	No
2-A-62	Var	2	Ams	Con	2	2.00	1.00							None	....	165	8	No
2-B-62	Var	2	Ams	Con	2	1.33	1.00							None	....	165	8	No
2-A-86	Var	2	Ams	Con	2	2.27	1.00							None	....	240	14	No
2-B-86	Var	2	Ams	Con	2	1.32	1.00							None	....	240	14	No
3-A-86	Var	3	Ams	Con	2	1.99	1.00							None	.77	340	17	Yes
3-B-86	Var	3	Ams	Con	2	1.24	1.00							None	.848	340	17	Yes
3-C-86	Var	3	Ams	Con	2	1.35	1.00							None	.74	340	17	Yes
4-A-86	Var	4	Eng	CC	4	6.54	3.27	1.76	1.00					7.24	....	420	22	Yes
4-A-860	Var	4	Eng	CC	3	3.72	1.86	1.00						4.12	.76	420	22	Yes
4-AM-86	Var	4	Ams	CC	4	6.54	3.27	1.76	1.00					7.24	....	370	22	Yes
4-AM-860	Var	4	Ams	CC	3	3.72	1.86	1.00						4.12	.76	370	22	Yes
4-B-86	Var	4	Eng	CC	4	5.55	3.27	1.76	1.00					6.58	....	420	22	Yes
4-BM-86	Var	4	Ams	CC	4	5.55	3.27	1.76	1.00					6.58	....	370	22	Yes
5-A-33	Var	5	Eng	CC	5	7.53	4.30	2.52	1.42	1.00				7.37	....	210	12	Yes
5-A-330	Var	5	Eng	CC	5	6.10	3.48	1.79	1.00					5.96	.768	210	12	Yes
5-B-33	Var	5	Eng	CC	5	7.53	4.30	2.52	1.42	1.00				7.37	....	218	12	Yes
5-B-330	Var	5	Eng	CC	4	6.10	3.48	1.79	1.00					5.96	.768	218	12	Yes
5-F-33	Var	5	Eng	CC	5	7.53	4.30	2.52	1.42	1.00				7.37	....	220	12	Yes
5-F-330	Var	5	Eng	CC	4	6.10	3.48	1.79	1.00					5.96	.768	220	12	Yes
5-G-33	Var	5	Eng	CC	5	7.53	4.30	2.52	1.42	1.00				7.37	....	228	12	Yes
5-G-330	Var	5	Eng	CC	4	6.10	3.48	1.79	1.00					5.96	.768	228	12	Yes
5-M-33	Var	5	Ams	CC	5	7.53	4.30	2.52	1.42	1.00				7.37	....	185	12	Yes
5-M-330	Var	5	Ams	CC	4	6.10	3.48	1.79	1.00					5.96	.768	185	12	Yes
5-A-43	Var	5	Eng	CC	5	8.03	4.61	2.46	1.41	1.00				(e)	....	330	16	Yes
5-A-430	Var	5	Eng	CC	4	6.52	3.33	1.77	1.00					(f)	.771	330	16	Yes
5-F-43	Var	5	Eng	CC	5	8.03	4.61	2.46	1.41	1.00				(e)	....	340	16	Yes
5-F-430	Var	5	Eng	CC	4	6.52	3.33	1.77	1.00					(r)	.771	340	16	Yes
5-M-43	Var	5	Ams	CC	5	8.03	4.61	2.46	1.41	1.00				(e)	....	280	16	Yes
5-M-430	Var	5	Ams	CC	4	6.52	3.33	1.77	1.00					(f)	.771	280	16	Yes
5-A-62	Var	5	Eng	CC	5	8.08	4.67	2.62	1.38	1.00				(g)	....	370	24	Yes
5-A-620	Var	5	Eng	CC	4	7.07	3.50	1.72	1.00					(h)	.776	370	24	Yes
5-F-62	Var	5	Eng	CC	5	8.08	4.67	2.62	1.38	1.00				(g)	....	385	24	Yes
5-F-620	Var	5	Eng	CC	4	7.07	3.50	1.72	1.00					(h)	.776	385	24	Yes
5-M-62	Var	5	Ams	CC	5	8.08	4.67	2.62	1.38	1.00				(g)	....	320	24	Yes
5-M-620	Var	5	Ams	CC	4	7.07	3.50	1.72	1.00					(h)	.776	320	24	Yes
8-A-86	Var	8	Eng	CC	8	14.83	7.42	6.54	3.99	3.27	2.27	1.76	1.00	(k)	....	650	36	Yes
8-A-60	Var	8	Eng	CC	7	8.44	4.22	3.72	2.27	1.86	1.72	1.00		(m)	.76	650	36	Yes
8-AM-86	Var	8	Ams	CC	8	14.83	7.42	6.54	3.99	3.27	2.27	1.76	1.00	(k)	....	550	36	Yes
8-AM-860	Var	8	Ams	CC	7	8.44	4.22	3.72	2.27	1.86	1.72	1.00		(m)	.76	550	36	Yes
8-B-86	Var	8	Eng	CC	8	12.56	7.42	5.55	3.99	3.27	2.27	1.76	1.00	(o)	....	650	36	Yes
8-B-860	Var	8	Eng	CC	7	7.14	4.22	3.15	2.27	1.86	1.72	1.00		(p)	.76	650	36	Yes
8-BM-86	Var	8	Ams	CC	8	12.56	7.42	5.55	3.99	3.27	2.27	1.76	1.00	(o)	....	550	36	Yes
8-BM-860	Var	8	Ams	CC	7	7.14	4.22	3.15	2.27	1.86	1.72	1.00		(p)	.76	550	36	Yes
8-C-86	Var	8	Eng	CC	8	8.63	6.54	4.32	3.27	2.32	1.76	1.32	1.00	(q)	....	650	36	Yes
8-C-860	Var	8	Eng	CC	6	4.91	3.72	2.46	1.86	1.32	1.00			(r)	(u)	650	36	Yes
8-D-86	Var	8	Eng	CC	8	7.33	5.55	4.32	3.27	2.32	1.76	1.32	1.00	(s)	....	650	36	Yes
8-D-860	Var	8	Eng	CC	6	4.16	3.15	2.46	1.86	1.32	1.00			(t)	(u)	650	36	Yes
INTERNATIONAL																		
HDS	....	3	Eng	SC	3	3.05	1.48	1.00						3.70	....	49	3	No
HDS-A	....	3	Eng	SC	3	3.05	1.48	1.00						3.70	....	49	3	No
H-41	....	4	Eng	Cla	4	6.40	3.09	1.69	1.00					7.82	....	104	5½	Yes
WARNER																		
T9A	180	4	Eng	....	4	5.90	3.09	1.69	1.00					7.21	....	129†	6	Yes
T9	165	4	EA	....	4	6.40	3.09	1.69	1.00					7.82	....	98	6	Yes
T89	150	3	Eng	Con	3	3.58	1.83	1.00						4.25	....	110§	4	No
T89	150	3	Eng	SC	3	3.58	1.83	1.00						4.25	....	110§	4	No

(k)—16.42 and 7.24 to 1
(m)—9.32 and 4.12 to 1
(o)—14.92 and 6.58 to 1
(p)—8.48 and 3.74 to 1
(q)—7.24 and 9.56 to 1
(r)—5.44 and 4.12 to 1
(s)—8.68 and 6.58 to 1
(t)—4.94 and 3.74 to 1
(u)—.86 and .65 to 1
Ams—Amidship
CC—Constant Mesh and Clash
Con—Constant Mesh
EA—On Engine or Amidship, optional
Eng—Unit with Engine
SC—Synchronising Clutches
Cla—Clash
Var—Varies

1941 ACCIDENT DATA

(Compiled by The Travelers)

WEATHER CONDITIONS PREVAILING

	Fatal Accidents	Per Cent	Non-Fatal Accidents	Per Cent
Clear	30,710	87.0	841,410	84.7
Fog	670	1.9	12,910	1.3
Rain	3,460	9.8	112,250	11.3
Snow	460	1.3	26,830	2.7
Total	35,300	100.0	993,400	100.0

ROAD CONDITIONS PREVAILING

	Fatal Accidents	Per Cent	Non-Fatal Accidents	Per Cent
Dry	29,010	82.2	751,010	75.6
Wet	4,840	13.7	157,950	15.9
Snowy	530	1.5	29,800	3.0
Icy	920	2.6	54,640	5.5
Total	35,300	100.0	993,400	100.0

DIRECTION OF TRAVEL

	Persons Killed	Per Cent	Persons Injured	Per Cent
Going straight	33,480	83.7	1,123,440	75.5
Turning right	640	1.6	34,230	2.3
Turning left	1,560	3.9	101,180	6.8
Backing	520	1.3	23,810	1.6
Skidding	2,160	5.4	65,470	4.4
Car parked or standing still	920	2.3	72,910	4.9
Slowing down or stopping	680	1.7	63,980	4.3
Miscellaneous	40	.1	2,980	.2
Total	40,000	100.0	1,488,000	100.0

ROAD LOCATION OF ACCIDENTS

	Persons Killed	Per Cent	Persons Injured	Per Cen
Between intersections	10,760	26.9	573,000	38.5
Rural intersections	1,640	4.1	40,180	2.7
Highway	13,330	33.3	211,300	14.2
Driveway	480	1.2	19,340	1.3
Curve	4,040	10.1	59,520	4.0
Street intersections	7,440	18.6	555,980	37.4
Railroad crossing	1,710	4.3	10,830	.7
Bridge	600	1.5	17,850	1.2
Total	40,000	100.0	1,488,000	100.0

ACTIONS OF DRIVERS RESULTING IN DEATHS AND INJURIES

	Persons Killed	Per Cent	Persons Injured	Per Cent
Exceeding speed limit	11,310	41.9	267,310	28.2
On wrong side of road	4,700	17.4	141,240	14.9
Did not have right-of-way	3,080	11.4	244,560	25.8
Cutting in	510	1.9	26,540	2.8
Passing standing street car	60	.2	1,900	.2
Passing on curve or hill	410	1.5	12,320	1.3
Passing on wrong side	320	1.2	14,220	1.5
Failed to signal and improper signaling	760	2.8	83,410	8.8
Car ran away — no driver	30	.1	950	.1
Drove off roadway	940	3.5	17,060	1.8
Reckless driving	3,180	11.8	96,680	10.2
Miscellaneous	1,700	6.3	41,710	4.4
Total	27,000	100.0	947,900	100.0

DRIVERS' HOURS OF SERVICE

CLUTCH SPECIFICATIONS

REGULATIONS AS OF JANUARY 1, 1942

State	Vehicles Affected	LIMIT OF HOURS ON DUTY: When Consecutive	Min. Hrs. Off Duty	When Not Consecutive (Hours allowed) (Period in hrs.)	Min. Hrs. Off Duty
Ala.	Common & Contract Carriers	8	8	8 in 12	8
Ariz.	Motor & Private Property Carriers	10(a)	8	10 in 24	8
Ark.	Common and Contract Carriers*	12	8	14(b) in 24	8
Calif.	Common Carriers	Same	as I.	C. C. Regulations	Below
	Other For-Hire Passenger Carriers*	10	8	10 in 15	8
	Other Property Transporters*	12	8	12 in 15	8
				10 in 24	8
Colo.	All Carriers*			16(e) in 24	10
Conn.	Commercial & Public Service	12	8	16 in 24	
Dela.	Commercial (trucks and buses)	8*	2	16 in 24	8
D. C.	For-Hire Buses Over Regular Routes	12		C. C. Regulations	Below
Fla.	For-Hire	Same	as I.		
Ga.	For-Hire Carriers	10	10	12 in 24	8
Idaho.	Transportation Companies (Common)	Same	as I.	C. C. Regulations	Below
Ill.	Passenger Common Carriers	10	8	10 in 16	8
	Trucks			12* in 24	8
				15 in 24	8
Ind.	Common & Contract	8(h)		14 in 24	
Iowa.	For-Hire*	12	10	12 in 24	8
Kans.	Common, Contract & Private Carriers	12		16 in 24	
	Same (sleeper cabs)	36		(l)	12(f)
Ky.	Common & Contract Carriers	12	8	16(e) in 24	10
La.			NO	LIMITATIONS	
Me.	Property For-Hire	12	8	16(e) in 24	10
Md.			NO	LIMITATIONS	
Mass.	Motor Buses			10 in 16	
	Property Transporters	12	8	16(e) in 24	10
Mich.	Common & Contract Carriers*	12	10	12 in 24	8
	Trucks	12(h)	10	12 in 14	10
Minn.	For-Hire Carriers	Same	as I.	C. C. Regulations	Below
Miss.	Motor Carriers	Same	as I.	C. C. Regulations	Below
Mo.	All Carriers*	10	10	10	10
Mont.	Motor Carriers*			8 in 24	8
	Buses			8 in 24	12
	All Motor Vehicle Operators			8 in 24	
Neb.	Motor Carriers			12 in 24	
Nev.	For-Hire*	12		12 in 15	8
N. H.	For-Hire Trucks	12	8	16(e) in 24	10
	Buses		NO	LIMITATIONS	
N. J.	Commercial Trucks & Buses	12(i)	8	12 in 16(i)	8
N. M.	For-Hire	10	8	16(e) in 24	
N. Y.	Trucks & Buses	10(k)	8	10 in 14	8
N. C.	For-Hire Carriers	Same	as I.	C. C. Regulations	Below
N. D.	Common & Contract Carriers	10	10	10 in 24	10
Ohio.	Bus Drivers			14 in 24(e)	
	Truck Drivers	14	8	14 in 24	8
Okla.	Motor Carriers* (including private)			10	8
Ore.	All Motor Carriers*	12	10	12 in 24	10
Penn.	Motor Carriers	Same	as I.	C. C. Regulations	Below
R. I.	Merchandise or Public Service	12	8	16(e) in 24	10
S. C.	Motor Carriers	Same	as I.	C. C. Regulations	Below
S. D.	Motor Carriers	12	12	12(e) in 24	8
Tenn.	Motor Carriers*			12 in 24 (63 driving hrs. in any 7-day period.)	8
Tex.	Motor Carrier Trucks	10	8	10 in 24	8
Utah.	All Motor Carriers	8		10(j) in 24	
Vt.			NO	LIMITATIONS	
Va.	Common Carriers*			8 in 24	10
	Motor Vehicles*			13 in 24	
Wash.	Motor Freight Carriers	10	8	10 in 24	8
	Passenger Common Carriers			10 in 24	8
W. Va.			NO	LIMITATIONS	
Wis.	Motor Carriers	Same	as I.	C. C. Regulations	Below
Wyo.	Motor Carriers	10	8	14 in 24	10
Federal (ICC)	Interstate Common Contract and Private Carriers			10(m) in 24	8
				(60 hrs. in any week of 168 consecutive hours or 70 hours in any 192 consecutive hours.)	

*—Limit is actual driving hours.

(a)—Or drive a passenger carrier vehicle over 275 miles.

(b)—If 2 hours' rest period provided.

(c)—Or drive a passenger coach more than 300 miles in continuous service or 1500 miles in any week.

(d)—Nine hours at end of two 7-hour periods with one hour rest intervening.

(e)—No period off duty shall be deemed to break the continuity of service unless it be for at least 3 hours.

(f)—Or one-third of the time on duty.

(h)—No period off duty shall be deemed to break the continuity of service unless it be for not less than 2 hours at a place where food and lodging may be secured.

(i)—Time taken for meals not counted in time on duty.

(j)—May be spread over 15 hours provided time between runs is sufficient to permit rest and relaxation.

(k)—Includes time for meals.

CLUTCH MAKE AND MODEL	Rated Torque Capacity (Lb. Ft.)	FACINGS: Type	Outside Diameter (Inches)	Inside Diameter (Inches)	Number of Facings	Total Area (One Facing)	PRESSURES (Lb.): Total Spring Pressure	Total on Friction Face	Per Sq. In. of Friction Surface	Overall Outside Diameter (In.)	Means of Adjustment	Bell Housing (S. A. E. No.)	Weight, Complete (Lb.)
BORG & BECK													
10A7	150	SP	10	6	2	50.0	1410	1410	28.2	12⅜	None	5+	18¼
11A6	180	SP	11	6½	2	65.5	1770	1770	26.3	13⅝	None	4+	26
12Q	220	SP	11⅞	7¼	2	69.5	340	1800	26.0	12¾	CPP	4+	34¾
13Q	260	SP	12⅞	7¼	2	89.0	425	2250	25.3	13⅜	CPP	3+	41
14Q	375	SP	13⅞	7¼	2	110.0	400	2420	22.0	14⅜	CPP	3+	55½
BROWN-LIPE[1]													
13-S.P.		SP	12⅞	7½	2	86.0	320	2240	26.0	14⅝	TR	3+	45
13-Two-plate		SP	13	7⅝	4	90.0	500	2750	30.6	15½	TR	3+	84
14-S.P.		SP	13¾	7½	2	106.0	420	2940	27.8	15½	TR	3+	58
14-Two-plate		SP	13¾	7½	4	105.7	500	2750	26.0	16¼	TR	2+	96
CHEVROLET													
1941-½ Ton	200	SP	9⅛	6⅛	2	35.9	(a)	(a)	(c)	11 7/16	RC	Spec	16.1
1941-¾-1½ T	200	SP	10¾	7	2	52.3	(b)	(b)	(d)	13 1/16	RC	Spec	21.7
LIPE, W. C.													
Z34-S	214	SP	11⅞	7¼	2	69.5	360	1794	25.8	13⅝	Shim	3+	38
Z30-S	270	SP	12⅞	7¼	2	89.0	360	2132	24.0	14⅝	Shim	3+	47½
Z32-S	340	SP	13⅞	7¼	2	110.0	415	2556	23.2	15⅝	Shim	3+	57½
Z31-S	422	SP	13⅞	7¼	2	110.0	480	3212	28.9	15⅝	Shim	3+	60
Z42-S	431	SP	15	8	2	128.0	490	3020	23.4	16¾	Shim	2+	73
Z40-S	566	SP	15	8	2	128.0	575	3870	30.2	16¾	Shim	2+	74
Z37-S	568	DP	12⅞	7¼	4	89.0	480	2256	25.4	15⅝	Shim	2+	90½
Z54-S	700	DP	13⅞	7¼	4	104.0	480	2535	24.6	16¼	Shim	2+	97.5
Z40-SX	708	SP	15	8	2	128.0	630	5925	38.4	16¾	Shim	2+	74
Z38-S	1100	DP	14½	8	4	115.0	575	3865	33.6	16¾	Shim	2+	105
LONG													
8½CB	75	SP	8½	6	2	28.5	Var	Var	Var	9⅛	None	6+	10¾
8CF	100	SP	7⅞	5⅛	2	28.1	Var	Var	Var	10⅜	None	6+	9
9CF	135	SP	9	5¾	2	37.5	Var	Var	Var	11	None	5+	14½
9½CF	150	SP	9½	6	2	42.6	Var	Var	Var	11½	None	5+	15¾
10CF	165	SP	10	6	2	50.2	Var	Var	Var	12	None	5+	20½
11CF	195	SP	11	6½	2	61.8	Var	Var	Var	13	None	4+	23¾
29A	225	DP	9¾	6¼	4	44.0	Var	Var	Var	11½	None	4+	33
12CB	250	SP	12	7	2	74.6	Var	Var	Var	14⅝	None	3+	37¾
31A	300	DP	11	6½	4	61.7	Var	Var	Var	13	None	4+	44
13-6	350	SP	13¾	7¼	2	107.0	Var	Var	Var	15½	NC	2+	62
14B	325	SP	13¾	7¼	2	107.0	Var	Var	Var	16½	NC	2+	58
15-4	500	SP	15½	9	2	125.0	Var	Var	Var	17¾	NC	1+	64
34BD	550	DP	13¾	7¼	4	107.0	Var	Var	Var	16½	NC	2+	100
17	600	SP	16¾	10	2	141.8	Var	Var	Var	19⅜	NC	1+	96
215	800	DP	15½	9	4	125.0	Var	Var	Var	17⅜	NC	2+	120
217	1200	DP	16¾	10	4	141.8	Var	Var	Var	19⅜	NC	1+	135
ROCKFORD													
6TS	35	SP	6	4	2	15.0	330	330	21.0	7⅝	None		3½
8-11	110	SP	7⅛	5⅛	2	26.0	720	720	27.6	9 3/16	None	4, 5	11
9-RM	115	SP	8⅛	5¾	2	36.0	750	750	20.8	11⅝	None	2,3,4,5	13
8½-RM	120	SP	8 1/16	5½	2	30.0	822	822	27.0	10 5/16	None		9½
9-11	192	SP	8⅛	5¾	2	36.0	930	930	25.9	10 1/16	None	2,3,4,5	14
10-RM	175	SP	9⅞	6⅝	2	42.0	1020	1020	24.3	11 1/16	None	2,3,4,5	15½
9-TT	210	SP	9	5¾	2	37.5	1350	1350	36.0	11 1/16	None	2,3,4,5	17
10-TT	250	SP	9⅞	6½	2	47.0	1500	1500	32.0	12	None	2,3,4,5	20½
11RM	310	SP	10⅞	6⅞	2	55.0	1665	1665	30.0	12 1/16	None	2, 3, 4	22
11-TT	320	SP	10⅞	6⅞	2	55.5	1740	1740	31.8	13	None	2, 3, 4	29
12-11	347	SP	11⅞	6⅞	2	73.5	1665	1665	22.5	13 1/16	None	2, 3, 4	27
12-TT	425	SP	11⅞	6⅞	2	73.0	2175	2175	29.3	14⅝	None	2, 3, 4	42½
14-11	590	SP	13⅞	8	2	101.0	2460	2460	24.3	15⅝	None	1, 2, 3	50
14-TT	600	SP	13⅞	8	2	101.0	2625	2625	26.0	15½	None	1, 2, 3	48
15-O	600	SP	15	8	2	126.5	2680	2680	22.8	17¼	None	1, 2, 3	83
15-TT	920	SP	15	8	2	126.5	3150	3150	25.0	16⅝	None	1, 2, 3	86½
18-TT	1960	DP	17⅝	9⅝	4	171.0	3360	3360	19.6	20¼	None	0, 00	422

CLUTCH ABBREVIATIONS

+—And larger
[1]—Spicer Mfg. Co.
(a)—1100-1225 lbs.
(b)—1200-1250 lbs.
(c)—15.3 to 17.1 lbs.
(d)—11.5 to 11.9 lbs.
CPP—Cam on Pressure Plate
DP—Double Plate, Dry
NC—Nuts on Cover Plate
RC—Linkage between Release and Clutch Pedal
SP—Single Plate, Dry
Spec—Special
TR—Threaded ring
Var—Varies

(l)—Seventy-two hours in 7-day period or 96 hours in such period if a sleeper cab.

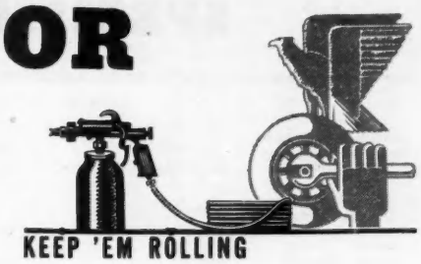
(m)—Twelve hours in aggregate permitted in adverse weather and traffic conditions, provided the Bureau of Motor Carriers is notified.

(min)—Minimum

SPECIFICATIONS FOR

PREPARING SURFACES FOR

PAINTING



Here for the second time Commercial Car Journal presents the recommendations of the various paint manufacturers for the preparation of and undercoat application on 12 types of surface which the truck fleet painter encounters.

The four stages of preparation and undercoat application—cleaning, surface treatment, priming and surfacing—take the painter up to the application of the color coat. From that point on the process is uniform or, at least, it presents fewer problems than the earlier steps.

In the early steps various materials are used on the different surfaces. These are so varied that it is next to impossible for a painter to remember them all. This chart, therefore, is a substitute for fallible memory, and a definite guide to the correct materials for particular applications.

Surface to be Painted and Recommending Manufacturer	CLEANER		SURFACE TREATMENT		PRIMER		SURFACER	
	Brand Name and Symbol	Drying Time	Brand Name and Symbol	Drying Time	Brand Name and Symbol	Drying Time	Brand Name and Symbol	Drying Time
ALUMINUM								
Ditzler	Ditzler Wax and Grease Remover (Z-414)	None	Ditzler Rust Remover and Metal Cleaner (Z-453	None	Ditzco Zinc Chromate Primer-Surfacer (PS-21)	4 hr.	None	None
DuPont	Rust Remover	None	Wash with water	None	Preparakote (High Solids)	4 hr.*	Preparakote (High Solids)	4 hr.*
Lowe Bros.	Kleenite	None	None	None	Zinc Chromate Primer	½ hr.	Nepto-Namel Surfacer	ON
Pittsburgh Plate Glass	90-102 Mimax Surface Cleaner	5 min.	Phosphoric Acid Type Cleaner	None	29-50 Lavax Gray Primer Surfacer	½-1 hr.	29-50 Lavax Primer Surfacer	1 hr.
Sewall	982 Metal Cleaner	5 min.	Roughen	None	1861 Specification Metal Primer—P-27 Zinc Chromate aircraft aluminum primer	1-1½ hr.	1854 Fleet Undercoat	2 hr.
Sherwin-Williams	Naphtha	None	Metal-Prep	Wipe Dry	Kem Primers 43800 Series	4 hr.†	Kem Surfacers 43820 Series	18 hr.
CADMIUM PLATE								
Ditzler	Scouring Powder	None	Ditzler Wax and Grease Remover (Z-414)	None	Ditzco Stainless Steel Primer (Z-774)	ON	Ditzler Primer Surfacer	4 hr.
DuPont	Naphtha	None	Thorough Sand with 150	None	Preparakote (High Solids)	4 hr.*	Preparakote (High Solids)	4 hr.*
Lowe Bros.	None	None	None	None	None	None	None	None
Pittsburgh Plate Glass	None	None	Metal-prep 610 or 2% acetic acid solution	None	29-55 Lavax Metal Primer (Zinc dust type)	4-6 hr.	29-50 Lavax Primer Surfacer	1 hr.
Sewall	None	None	None	None	None	None	None	None
Sherwin-Williams	Naphtha	None	Metal-Prep	Wipe Dry	Kem Primers 43800 Series	4 hr.†	Kem Surfacers 43820 Series	18 hr.
CANVAS								
Ditzler	Ditzler Wax and Grease Remover (Z-414)	None	None	None	Ditzler Canvas Sealer (Z-498)	ON	None	None
DuPont	Naphtha	None	None	None	475-6402 Gray Wood Primer	24 hr.	None	None
Lowe Bros.	None	None	Size and Stretch	None	White lead and oil	24-48 hr.	None	None
Pittsburgh Plate Glass	Solvent Wash	None	None	None	Tector	ON	None	None
Sewall	Water Wash	None	None	None	LX14	1 hr.	1852 Sewall Undercoat	2 hr.
Sherwin-Williams	Naphtha	None	None	None	Kem Canvas Sealer 03316	24 hr.	None	None
GALVANNEALED								
Ditzler	Ditzler Wax and Grease Remover (Z-414)	None	Ditzler Rust Remover and Metal Cleaner (Z-453)	None	Ditzco Zinc Primer (Z-659)	¼-½ hr.	Ditzco Primer Surfacers	4 hr.
DuPont	Naphtha	None	Sand with 150 sandpaper	None	Preparakote (High Solids)	4 hr.*	Preparakote (High Solids)	4 hr.*
Lowe Bros.	V M P Naphtha	None	None	None	Nepto-Namel-Primer-Surfacer	4-5 hr.	Nepto-Namel Surfacer C-10722	ON
Pittsburgh Plate Glass	90-102 Mimax Surface Cleaner	5 min.	Copper Sulphate Wash	5 min.	29-55 Lavax Metal Primer (Zinc dust type)	1 hr.	29-50 Lavax Primer Surfacer	4 hr.
Sewall	982 Metal Cleaner	None	Copper Sulphate Wash	5 min.	1854 Fleet Undercoat	2 hr.	1854 Fleet Undercoat	4 hr.
Sherwin-Williams	Naphtha	None	None	None	Kem Primers 43800 Series	4 hr.†	Kem Surfacers 43820 Series	18 hr.
MASONITE								
Ditzler	Ditzler Wax and Grease Remover (Z-414)	None	None	None	Ditzco Masonite Primers PS-57 Gray, PS-58 Red	4 hr.	None	None
DuPont	Naphtha	None	Slight Sand	None	Preparakote (High Solids)	4 hr.*	Preparakote (High Solids)	4 hr.*
Lowe Bros.	None	None	None	None	Nepto-Namel-Primer-Surfacer C-7449	4-5 hr.	None	None
Pittsburgh Plate Glass	None	None	Sand with production paper	None	29-54 Lavax Wood Primer	ON	29-50 Lavax Primer Surfacer	1 hr.
Sewall	Sandpaper	None	None	None	1854 Fleet Undercoat thinned for primer coat	1 hr.	1854 Fleet Undercoat thinned for surfacer coat	4 hr.
Sherwin-Williams	Naphtha	None	Kem Clear Sealer 06025	1 hr.	Kem Primers 43800 Series	4 hr.†	Kem Surfacers 43820 Series	18 hr.
OLD FINISH								
Ditzler	Ditzler Wax and Grease Remover (Z-414)	None	None	None	Ditzco Primer Surfacers	4 hr.	None	None
DuPont	Prep-sol	None	Sand with water	None	Preparakote (High Solids)	4 hr.*	Preparakote (High Solids)	4 hr.*
Lowe Bros.	Kleenite	None	Sand	None	Nepto-Namel-Primer-Surfacer C-7449	4-5 hr.	None	None
Pittsburgh Plate Glass	90-102 Mimax Surface Cleaner	5 min.	Sand with 280-A sandpaper and water	None	29-50 Lavax Gray Primer-Surfacer	½-1 hr.	29-50 Lavax Primer-Surfacer	1 hr.
Sewall	658 Kleen-off liquid or 769 Ex Wax	5 min.	Sand	None	1854 Fleet Undercoat Thinned for Prime	15 min.	1854 Fleet Undercoat or E-43 Surfacer	1 hr.
Sherwin-Williams	Sher-Will-Clean 02998	None	Sand	None	Kem Primers 43800 Series	4 hr.†	Kem Surfacers 43820 Series	18 hr.
PRIME								
Ditzler	Ditzler Wax and Grease Remover (Z-414)	None	Sand	None	None	None	Ditzco Primer-Surfacers	4 hr.
DuPont	Prep-sol	None	Slight Sand	None	None	None	Preparakote (High Solids)	4 hr.*
Lowe Bros.	None	None	Wet sand and wipe	None	None	None	Nepto-Namel Surfacer C-10722	ON

CONTINUED ON NEXT PAGE

SPECIFICATIONS FOR PAINTING (CONTINUED)

Surface to be Painted and Recommending Manufacturer	CLEANER		SURFACE TREATMENT		PRIMER		SURFACER	
	Brand Name and Symbol	Drying Time	Brand Name and Symbol	Drying Time	Brand Name and Symbol	Drying Time	Brand Name and Symbol	Drying Time
PRIME—Cont'd								
Pittsburgh Plate Glass	90-102 Mimax Surface Cleaner	5 min.	Sand with 320-A sandpaper and water	None	None	None	29-50 Lavax Primer Surfacer	1 hr
Sewall	769 Ex Wax	5 min.	Sand	None	Metal Primer	None	1854 Fleet Undercoat	4 hr.
Sherwin-Williams	Naphtha	None	Sand	None	Kem Primers 43800 Series	4 hr.†	Kem Surfacers 43820 Series	18 hr.
PAINT GRIP								
Ditzler	Ditzler Wax and Grease Remover (Z-414)	None	None	None	Ditzco Primer-Surfacers	4 hr.	None	None
DuPont	Naphtha	None	None	None	Preparakote (High Solids)	4 hr.*	Preparakote (High Solids)	4 hr.*
Lowe Bros.	V M P Naptha	None	None	None	Nepto-Namel-Primer-Surfacer	4-5 hr.	Nepto-Namel Surfacer C-10722	ON
Pittsburgh Plate Glass	90-102 Mimax Surface Cleaner	5 min.	None	None	29-50 Lavax Gray Primer Surfacer	½-1 hr.	29-50 Lavax Primer Surfacer	1 hr.
Sewall	982 Metal Cleaner	5 min.	Roughen	None	1854 Fleet Undercoat	2 hr.	1854 Fleet Undercoat	4 hr.
Sherwin-Williams	Naphtha	None	None	None	Kem Primers 43800 Series	4 hr.†	Kem Surfacers 43820 Series	18 hr.
PLYWOOD								
Ditzler	Ditzler Wax and Grease Remover (Z-414)	None	None	None	Ditzco Wood Preserver and Sealer (Z-707)	1 hr.	Ditzco Primer-Surfacers	4 hr.
DuPont	Naphtha	None	Slight Sand	None	RK-3037 Clear Wood Primer	Wipe in 15 min.	Preparakote (High Solids)	4 hr.*
Lowe Bros.	None	None	Sand	None	Oil Primer C-10719	ON	Nepto-Namel C-10722	ON
Pittsburgh Plate Glass	None	None	Sand with production paper	None	29-54 Lavax Wood Primer	ON	29-50 Lavax Primer-Surfacer	1 hr.
Sewall	Sand	None	None	None	X75 Wood Sealer	4 hr.	1854 Fleet Undercoat	4 hr.
							1848 Paste Undercoat	4 hr.
Sherwin-Williams	None	None	Kem Clear Sealer 06025	1 hr.	Kem Primers 43800 Series	4 hr.†	Kem Surfacers 43820 Series	18 hr.
STEEL								
Ditzler	Ditzler Wax and Grease Remover (Z-414)	None	Ditzler Rust Remover and Metal Cleaner (Z-453)	None	Ditzco Primer-Surfacers	4 hr.	None	None
DuPont	Sand with Rust Remover	None	Wash with Water	None	Preparakote (High Solids)	4 hr.*	Preparakote (High Solids)	4 hr.*
Lowe Bros.	V M P Naphtha	None	None	None	Nepto-Namel Primer-Surfacer C-7449	4-5 hr.	Nepto-Namel Surfacer C-10722	ON
Pittsburgh Plate Glass	90-102 Mimax Surface Cleaner	5 min.	Phosphoric Acid Type Cleaner	None	29-50 Lavax Gray Primer Surfacer	½-1 hr.	29-50 Lavax Primer Surfacer	1 hr
Sewall	982 Metal Cleaner	5 min.	Sand bright and Metal-Prep.	None	1854 Fleet Undercoat	2 hr.	1854 Fleet Undercoat	4 hr.
							1848 Paste Undercoat	4 hr.
Sherwin-Williams	Naphtha	None	Metal-Prep	Wipe Dry	Kem Primers 43800 Series	4 hr.†	Kem Surfacers 43820 Series	18 hr.
WOOD								
Ditzler	Ditzler Wax and Grease Remover (Z-414)	None	None	None	Ditzco Wood Preserver and Sealer (Z-707)	1 hr.	Ditzco Primer-Surfacers	4 hr.
DuPont	Naphtha	None	Slight Sand	None	RK-3037 Clear Wood Primer	Wipe in 15 min.	Preparakote (High Solids)	4 hr.*
Lowe Bros.	None	None	Sand	None	Oil Primer C-10719	ON	Nepto-Namel Surfacer C-10722	ON
Pittsburgh Plate Glass	None	None	Sand with Production Paper	None	29-54 Lavax Wood Primer	ON	29-50 Lavax Primer-Surfacer	1 hr.
Sewall	Sand	None	None	None	3300 Line Oil Primer		1854 Fleet Undercoat	4 hr.
							1848 Paste Undercoat	4 hr.
Sherwin-Williams	None	None	Kem Clear Sealer 06025	1 hr.	Kem Primers 43800 Series	4 hr.†	Kem Surfacers 43820 Series	18 hr.
ZINC COATED								
Ditzler	Ditzler Wax and Grease Remover (Z-414)	None	Ditzler Rust Remover and Metal Cleaner (Z-453)	None	Ditzco Zinc Primer (Z-659)	¼-½ hr.	Ditzco Primer Surfacers	4 hr.
DuPont	Naphtha	None	Sand with 150 sandpaper	None	Preparakote (High Solids)	4 hr.*	Preparakote (High Solids)	4 hr.*
Lowe Bros.	Galvaprep or Lithoform	None	Wash with water	None	Nepto-Namel Primer-Surfacer C-7449	4-5 hr.	Nepto-Namel Surfacer C-10722	ON
Pittsburgh Plate Glass	90-102 Mimax Surface Cleaner	5 min.	Copper Sulphate Wash	5 min.	29-55 Lavax Metal Primer (Zinc dust type)	1 hr.	29-50 Lavax Primer Surfacer	4 hr.
Sewall	982 Metal Cleaner	5 min.	Copper Sulphate Wash	5 min.	1854 Fleet Undercoat	2 hr.	1854 Fleet Undercoat	4 hr.
Sherwin-Williams	Naphtha	None	Lithoform	None	Kem Primers 43800 Series	4 hr.†	Kem Surfacers 43820 Series	18 hr.

ON—Over night

*—4 hr.—Dry Sand; 15 hr.—Water Sand

†—Can be coated with Surfacer after 1 hr.

TRAILER REGISTRATIONS

(As of December 31, 1941)

	Trailers and Semi-Trailers	Passenger Car Trailers
Alabama	5,757	(1)
Arizona	5,323	.....
Arkansas	19,000	(2)
California	184,096	(2)
Colorado	1,887	(2)
Connecticut	2,325	5,736
Delaware	3,438	(2)
District of Columbia	848	.....
Florida	920	23,340
Georgia	13,682	2,905
Idaho	22,630	(2)
Illinois	32,236	.....
Indiana	69,552	5,011
Iowa	101,744	(2)
Kansas	5,953	(2)
Kentucky	(1)	(1)
Louisiana	17,992	(1)
Maine	11,715	.....
Maryland	6,870	.....
Massachusetts	18,695	(2)
Michigan	159,007	10,769
Minnesota	7,609	33,534
Mississippi	6,897	(2)
Missouri	46,052	(2)
Montana	6,544	.....
Nebraska	32,984	15,255
Nevada	1,797	(2)
New Hampshire	6,958	(2)
New Jersey	9,056	.....
New Mexico	3,414	(2)
New York	56,296	.....
North Carolina	47,775	(2)
North Dakota	347	1,540
Ohio	80,000	(2)
Oklahoma	7,770	1,044
Oregon	(3)	(3)
Pennsylvania	36,707	(2)
Rhode Island	1,381	(2)
South Carolina	4,536	(2)
South Dakota	25,782	(2)
Tennessee	(1)	(2)
Texas	61,397	(2)
Utah	649	(2)
Vermont	2,551	(2)
Virginia	7,491	6,992
Washington	25,000	.....
West Virginia	588	2,693
Wisconsin	6,937	1,984
Wyoming	11,466	(2)
Total	1,181,654	110,803

(1)—Not registered.

(2)—Included with Trailers and Semi-trailers.

(3)—Included with trucks.

TRUCK SPECIFICATIONS TABLE

OF STANDARD DOMESTIC MODELS

TABULATED BY COMMERCIAL CAR JOURNAL

and brought up to date in this issue from data supplied by manufacturers

KEY TO DEFINITIONS, ABBREVIATIONS AND REFERENCES

DEFINITIONS

MAKE AND MODEL
Only Domestic Truck Models are listed.

OPTIONAL UNITS
For the express purpose of best fitting the truck to the individual job most of the models listed can be provided with optional engines, transmissions, axles, etc., and these models when so equipped are considered standard stock models.

CHASSIS LIST PRICE
The chassis list price applies to the minimum standard wheelbase with standard tires and standard equipment. All prices are F.O.B. factory. Chassis list price does not include the price of the Cab unless otherwise noted.

RECOMMENDED GROSS VEHICLE WEIGHT FOR NORMAL SERVICE
The Gross Weights published herewith are those supplied by manufacturers as their Recommended Gross Vehicle Weights for Normal Operating Conditions, and are based upon the Maximum Authorized Tire Size listed. In actual practice the manufacturer may either increase or decrease the gross vehicle weight rating when either favorable or unfavorable operating conditions are involved. Since the proper performance of a motor truck depends upon many factors, including grades, road conditions, etc., the gross weights that a manufacturer is prepared to recommend will vary with particular conditions, and the manufacturer's own standard of safety factors. Specific recommendations, therefore, should be obtained from the manufacturer's representative.

CHASSIS WEIGHT
The chassis weight listed includes the weight of the minimum standard wheelbase chassis, with cowl, with standard tires, with standard equipment, with crankcase and cooling system full, and 5 gallons of fuel in the tank. It does not include the weight of the Cab. This applies to C.O.E. as well as conventional chassis types. Exceptions are noted.

STANDARD TIRE SIZE
The standard tire size listed is that which is included in the Chassis List Price.

MAXIMUM AUTHORIZED TIRE SIZE
The tire size listed in this column is the maximum size recommended by the manufacturer of the chassis for the Gross Vehicle Weight for Normal Operating Conditions. It is furnished at extra cost, if it differs from the standard size. Dual rears are understood; exceptions noted.

MINIMUM STANDARD WHEELBASE
The minimum standard wheelbase is the so-called standard wheelbase on which the Chassis List Price is based.

MAXIMUM STANDARD WHEELBASE
The maximum standard wheelbase is the extreme end of the standard range of wheelbases offered by the chassis maker.

MAXIMUM BRAKE HP.
Maximum Brake Horsepower at Given R.P.M. is actual dynamometer reading without accessories.

GEAR RATIO RANGE
Gear Ratio Range in High—Ratios within the range given are available at no extra cost. Exceptions are noted.

TRACTORS
Unless given the designation (N)—meaning not available as a tractor—all standard models may be assumed to be available as tractors. Exclusively Tractor models are designated (T).

KEY TO REFERENCES

c.f.—Cab Forward design.
c.o.e.—Cab-Over-Engine design.
(C)—Converted Ford or Chevrolet model, identifiable by engine make listed.
(D)—Diesel-engine equipped.
(T)—Designed for tractor use only.
(3) **Available**—All models available in either conventional or c.o.e. design, oversize power plants, oil engines and six-wheel construction.
(5) **Condor**—These models available with double drop bus frames.
(6) **Federal**—245 cu. in. engine and 11" clutch available on Models 16 and 76. 263 cu. in. engine and 11" clutch available on Models 16, 17, 76 and 77. 428 cu. in. engine available on Models 45, 55, 92 and 94. 501 cu. in. and 517 cu. in. engines available on Models 55 and 94. Oversize or two-speed rear axles available on Models 16, 17, 18, 20, 25, 29, 35, 45, 76, 77, 80, 85, 89, 90 and 92. Double reduction rear axles available on Models 20, 25, 29, 35, 45, 80, 85, 89, 90 and 92. Two- or three-speed auxiliary transmissions available on all models. Air brakes available on Models 25, 29, 35, 45, 55, 85, 89, 90, 92 and 94. Diesel engines available in all models except c.o.e. All above at extra cost.
(9) **Gramm**—Models 31, 41, 46, 56, 71, 76, 86 and 96 both gasoline and diesel available with double drop bus frames of various wheelbases. 221 cu. in. engine available on Model 21. 263 cu. in. engine available on Models 31 and 41. 282 cu. in. engine and 5 speed transmission available on Models 41, 46, and 56. 320 cu. in. engine and 5 speed transmission available on Models 41, 46, 56, and 71. 404 cu. in. engine and larger 5 speed transmission available on Model 86. Oversize two speed and double reduction axles available on Models 21, 31, 41, 46, 56, 71, 76 and 86 both gasoline and diesel. All other equipment furnished at extra cost.
(10) **Corbitt**—Wheelbases optional—any wheelbase desired furnished at chassis price listed.
(11) **International Harvester**—Specifications shown represent only the basic standard chassis units and standard chassis ratings in keeping with definitions established by Commercial Car Journal. Special units not shown such as engines, clutches, transmissions, axles or axle ratios, brakes, wheels and tires, frames or frame reinforcements, special wheelbases or any other units which make up part of the truck chassis and which International will furnish and approve from the factory as special equipment can or will change either the ratings, chassis weight shown or performance of the truck as indicated by this list.
Also the company reserves the privileges of assigning special gross vehicle ratings for any chassis providing in the opinion of our engineering department, the type of service justifies the new rating without decreasing the safety factor designed into the truck.
(a)—Available with Eaton Two-Speed Axle designated KS Models.
(b)—Available with IHC double reduction axle and designated KR Model.
(c)—Comparable chassis available with Cummins Diesel engine and designated KD Model.
(15) **Sterling**—Available with double reduction rear axle.
(16) **Sterling**—Diesel powered unit of comparable capacity available in addition to gasoline models.
(18) **Willys**—Advertised list price less Federal tax. Cab Pick-up $575; Panel Delivery $849. Prices, complete with shock absorbers and front and rear bumpers. Standard tires 5.50/16—4 ply; Panel Delivery 6.00/16—4 ply; 6.00/16S—6 ply—optional.

KEY TO ABBREVIATIONS

MAKES—ALL

B—Bendix.
BL—Brown-Lipe.
Bu or Bud—Buda.
Cat—Caterpillar.
Cl or Cla—Clark.
C or Chev—Chevrolet.
Con—Continental.
Col—Columbia.
Cum—Cummins-Diesel.
Det—Detroit Gear.
Eat—Eaton.
Fu—Fuller.
Her—Hercules.
L—Lockheed.
LH—Lockheed front, Wagner "hi-Tork" rear.
LO—Lockheed front, Own rear.
LW—Lockheed front, Wisconsin rear.
Lyc—Lycoming.
N.P.—New Process.
O or Ow—Own.
Op or Opt—Optional.
Sal—Salisbury.
Shu—Shuler.
T or Tim—Timken.
TO—Timken front, Own rear.
TW—Timken-Wisconsin.
TWH—Timken Wisconsin Herrington.
WG—Warner Gear.
WH—Wisconsin Herrington.
W-Hes—Waukesha Hesselman.
Wau—Waukesha.
W or Wis—Wisconsin.
WO—Wagner front, Own rear.
Ws—Westinghouse.

BRAKES—SERVICE

Location
2—Two Wheels, rear only.
4—Four Wheels, front and rear.
4r—Four Wheels, rear only.
6—Six Wheels, front and rear.

Type
I—Internal.
X—External.

Operation
A—Air.
D—Hydraulic and mechanical.
H—Hydraulic.
M—Mechanical.
V—Vacuum.

BRAKES—HAND

Location
C—Center of double propeller shaft.
2—Rear wheels.
2/4—Two-wheel brakes effective on all four wheels through driveshaft.
4—Four wheels.
6—Six wheels.
J—Jackshaft.
T—Transmission.
F—Driveshaft.
P—Propeller shaft.

Type
D—Tru-Stop disk.
I—Internal.
X—External.
PD—Two drums on rear of power divider.

BRAKE DRUMS

Material
a—Cast alloy iron.
A—American Car Foundry.
c—Cast iron.
C—Centrifuse.
Cl—Copper iron.
Co—Composite
D—Dayton.
E—Ermalite.
F—Furnace iron.
G—Gunite.
N—Nickel iron.
p—Pressed steel.
P—Pressed steel.
s—Cast steel.
(Where a combination of any of the above is used, the first reference mark applies to the front and the second to the rear drums.)

FRAME

Type
I—"I" Beam.
C—Channel.
T—Channel tapered front and rear.
L—Channel reinforced with liner.
B—Channel reinforced with both liner and fishplate.
P—Channel reinforced with plate.
TL—Channel tapered front and rear reinforced with liner.
D—Drop Center
Tf—Tapered front.
X—x-Braced.
S—Deep section channel frame with oak insert.
A—Straight section sidemembers, lined with oak inserts.
Y—Straight section channel sidemembers, lined with full length channel reinforcements, and oak inserts.

GOVERNOR STANDARD

V—Yes.
N—No.

REAR AXLE

Final Drive and Type
B—Bevel.
C—Chain.
D—Dead.
F—Full-floating.
Hy—Hypoid.
d—Dual range axle.
2—Double Reduction.
S—Spiral bevel.
W—Worm.
½—Semi-floating.
¾—Three-quarter floating.

Gear Ratios
(*)Ratios other than standard at extra cost.
(**) Only one ratio.

Drive and Torque
A—Radius Rods and Torque Arm.
H—Hotchkiss (springs).
R—Radius Rods.
T—Torque Arm.
U—Torque Tube.

WHEELS DRIVEN

2F—Forward unit of Rear Axle Group.
2R—Rear Unit of Rear Axle Group.
4R—Forward and rear units of Rear Axle Group.
4F—Front Axle and Forward unit of Rear Axle Group.
4FR—Front Axle and Rear unit of Rear Axle Group.
6—All wheels.

Line Number	MAKE AND MODEL	Chassis List Price	WHEEL-BASE Minimum Standard	WHEEL-BASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	TIRE SIZES: Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	TRANSMISSION: Forward Sp'ds	REAR AXLE: Make and Model	REAR AXLE: Gear and Type	REAR AXLE: Drive & Torque	REAR AXLE: Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES SERVICE: Make Location Type Operat'n	BRAKES SERVICE: Lining Area	BRAKES SERVICE: Drum Area	BRAKES SERVICE: Drum Material	BRAKES: Hand Location Type	C-A Dimension (Min. Std. W. B.)	FRAME: Side Rail Dimensions	FRAME: Type
1	Avail- (3) C-100	1370	Opt	Opt	11500	4000	6.50/20D	7.50/20	Wau BL	6-3 1/16x4 1/2	245	5.7	165	73-3000	7-2 5/16x10 1/4	N	WG T9	4	Tim 53514H	SF	H	5.4-6.6	Tim 30000H	L4IH	266	388	a	TX	60	10x3x 1/4	T
2	able C-200	1520	Opt	Opt	12600	4200	7.00/20D	7.50/20	Wau BL	6-3 1/16x4 1/2	245	5.7	165	73-3000	7-2 5/16x10 1/4	N	WG T9	4	Tim 53308H	SF	H	5.14-6.6	Tim 30000H	L4IH	304	477	a	TX	60	10x3x 1/4	T
3	C-250	1600	Opt	Opt	14000	4300	7.00/20D	8.25/20	Wau BL	6-3 1/16x4 1/4	245	5.7	165	73-3000	7-2 5/16x10 1/4	N	WG T9	4	Tim 53308H	SF	H	5.14-6.6	Tim 31000H	L4IH	300	552	a	TX	60	10x3x 1/4	T
4	C-300	1795	Opt	Opt	16000	4800	7.50/20D	8.25/20	Wau BM	6-3 5/16x4 1/4	263	5.7	178	78-3100	7-2 5/16x10 1/4	N	WG T9	4	Tim 54411H	SF	H	5.80-6.8	Tim 31000H	L4IH	328	603	a	TX	60	10x3x 1/4	T
5	C-350	1905	Opt	Opt	17000	4900	7.50/20D	9.00/20	Wau BK	6-3 3/8x4 1/4	282	5.7	188	85-3200	7-2 5/16x10 1/4	N	WG T9A	4	Tim 54411H	SF	H	5.80-6.8	Tim 32502H	L4IH	328	603	a	TX	60	10x3x 1/4	T
6	C-400	2135	Opt	Opt	20000	5400	8.25/20D	9.00/20	Wau BK	6-3 3/4x4 1/4	282	5.7	188	85-3200	7-2 5/16x10 1/4	N	WG T9A	5	Tim 56410H	SF	R	6.16-7.4	Tim 32502H	L4IH	328	603	a	TX	60	12x3x 1/4	T
♦ 7	C-400L	2240	Opt	Opt	20000	5500	8.25/20D	9.00/20	Wau BZ	6-4x4 1/4	320	5.7	210	86-3200	7-2 5/16x10 1/4	N	Fu 5A330	4	Tim 56410H	SF	R	6.16-7.4	Tim 32502	L4IH	328	603	a	TX	60	12x3x 1/4	T
8	C-500	2440	Opt	Opt	22000	6100	9.00/20D	9.00/20	Wau BZ	6-4x4 1/4	320	5.7	222	95-2800	7-2 5/16x10 1/4	Y	Fu 5A330	5	Tim 58300H	SF	R	5.20-7.8	Tim 33000H	L4IH	370	684	a	TX	60	12x3x 1/4	T
9	C-550	2880	Opt	Opt	23000	6800	9.00/20D	10.00/20	Wau MKR	6-4 1/16x4 3/4	381	5.3	270	99-2400	7-2 5/16x12 1/2	Y	Fu 5-A-430	5	Tim 58300H	SF	R	5.20-7.8	Tim 35000H	L4IH	370	684	a	TX	60	12x3x 1/4	T
10	C-600	3320	Opt	Opt	26500	7400	10.00/20D	11.00/20	Wau MZR	6-4 1/4x4 1/4	404	5.3	290	106-2400	7-2 5/16x12 1/2	Y	Fu 5-A-430	5	Tim 65743H	WF	R	6.8-10.25	Tim 35000H	L4IH	459	793	a	TD	60	12x3x 1/4	T
11	C-650	3800	Opt	Opt	26500	8000	10.00/20D	11.00/20	Wau 8RLR	6-4 5/16x5 1/8	462	5.5	330	112-2300	7-3x13 1/8	Y	Fu 5-A-620	5	Tim 65743H	WF	R	6.8-10.25	Tim 35000H	L4IH	459	793	a	TD	60	12x3x 1/4	T
12	C-700	4175	Opt	Opt	35000	8700	10.00/20D	12.00/20	Wau 8RKR	6-4 5/16x5 1/8	517	5.5	365	126-2300	7-3x13 1/8	Y	Fu 5-A-620	5	Tim 66728H	WF	R	6.8-10.25	Tim 26452H	L4IH	544	867	a	TD	60	12x3x 1/4	T
13	Bantam	349	75	75	1700	850	4.00/158	5.00/15	Own	4-2.26x3 1/16	50	7.4	34.1	22-3800	3-2 1/4x1.005	N	WG T48E	3	Spi 10	S	H	**-5.25	Spi 10	O4IM	76	104	P	4I	114	8x2 1/4 x.109	....
14	Brookway 78	895	138	164	13000	3965	6.00/20D	32x6	Con 24B	6-3 1/4x4 1/2	210	6.0	154	71-3100	4-2 3/4x6	N	WG T9	4	Tim 53521H	SF	H	5.66-6.6	Tim 30000H	L4IH	255	402	a	TX	65 1/4	8x3x 1/4	T
15	83	1195	138	176	14000	4100	6.50/20D	7.50/20	Con 25B	6-3 1/4x4 1/2	244	6.2	180	80.5-3100	4-2 3/4x6	N	WG T9	4	Tim 53521H	SF	H	5.66-6.6	Tim 30000H	L4IHV	255	402	a	TX	65 1/4	8x3x 1/4	T
16	88	1290	150	176	15000	4500	6.50/20D	7.50/20	Con 25B	6-3 1/4x4 1/2	244	6.2	180	80.5-3100	4-2 3/4x6	N	WG T9	4	Tim 53307H	SF	H	6.2 -6.8	Tim 30000H	L4IHV	298	477	a	TX	71 1/4	8x3x 1/4	T
17	92	1560	150	188	16000	4700	7.00/20D	8.25/20	Con 25B	6-3 1/4x4 1/2	244	6.2	180	80.5-3100	4-2 3/4x6	N	WG T9	4	Tim 54411H	SF	H	5.83-6.8	Tim 31000H	L4IHV	329	580	a	CD	83 1/4	8x3x 1/4	T
18	94	1850	156	188	18500	5050	7.50/20D	8.25/20	Con 25B	6-3 1/4x4 1/2	244	6.2	180	80.5-3100	4-2 3/4x6	N	BL B341	4	Tim 56411H	SF	H	6.16-7.4	Tim 31000H	L4IHV	370	660	a	CD	83 1/4	8x3x 1/4	T
19	112	1710	150	188	18000	5150	7.00/20D	8.25/20	Con 38B	6-3 3/4x4 1/2	290	6.0	217	92-2800	7-2 5/16x12 1/4	N	BL B341	4	Tim 54411H	SF	H	5.83-6.8	Tim 31000H	L4IHV	329	580	a	CD	77 1/4	8x3x 1/4	T
20	128	1950	156	188	20000	5550	7.50/20D	8.25/20	Con 38B	6-3 3/4x4 1/2	290	6.0	217	92-2800	7-2 5/16x12 1/4	N	BL B341	4	Tim 56411H	SF	H	5.71-7.4	Tim 31000H	L4IHV	370	660	a	CD	83 1/4	8x3x 1/4	T
21	130-FS	2525	164	206	20000	6250	34x7D	9.00/20	Con 29-B	6-3 11/16x4 1/2	288	5.4	192	78-2650	7-2 5/16x13	N	Fu 5-A-43	5	Tim 56411H	SF	R	6.16-7.4	Tim 32505H	L4IHV	370	660	a	CD	91 1/4	8x3x 1/4	B
22	146	2690	126	206	20000	6060	8.25/20D	9.00/20	Con 40B	6-4x4 1/4	330	6.0	245	104-2800	7-2 5/16x12 1/4	Y	Fu 5A330	5	Tim 56411H	SF	R	5.76-7.4	Tim 32505H	L4IHV	370	660	a	CD	53	8x3x 1/4	T
23	(T) 147	2855	132	164	.....	6000	8.25/20D	9.00/20	Con 40B	6-4x4 1/4	330	6.0	245	104-2800	7-2 5/16x12 1/4	Y	Fu 5A33	5	EatA17-17000	SFd	H	Dual Rge.	Tim 32505H	L4IHV	370	660	a	CD	53	8x3x 1/4	T
24	152	2870	126	206	22000	6350	8.25/20D	9.00/20	Con 41B	6-4 1/16x4 5/8	371	5.9	280	100-2500	7-2 5/16x13 1/2	Y	Fu 5A43	5	Tim 56411H	SF	R	5.71-6.83	Tim 32505H	L4IHV	370	660	a	CD	53	8x3x 1/4	T
25	(T) 153	3025	132	164	.....	6400	8.25/20D	9.00/20	Con 41B	6-4 1/16x4 5/8	371	5.9	280	100-2500	7-2 5/16x13 1/2	Y	Fu 5A43	5	Tim 58300H	SF	H	6.14-7.8	Tim 32505H	L4IHV	370	660	a	CD	53	8x3x 1/4	T
26	(T) 154	3050	132	164	.....	6300	8.25/20D	9.00/20	Con 41B	6-4 1/16x4 5/8	371	5.9	280	100-2500	7-2 5/16x13 1/2	Y	Fu 5A43	5	EatA17-17000	SFd	H	Dual Rge.	Tim 32505H	L4IHV	370	660	a	CD	53	8x3x 1/4	T
27	(T) 156	3700	132	164	.....	6950	9.00/20D	10.00/20	Con 42B	6-4 1/4x4 5/8	405	5.7	305	112-2500	7-2 5/16x13 1/2	Y	Fu 5A43	5	Eat A9-20000	SFd	H	Dual Rge.	Tim 32505H	L4IHV	459	768	a	CD	53	8 1/4x3x 1/4	T
28	162	3450	121	219	25000	7250	9.00/20D	10.00/20	Con 41B	6-4 1/16x4 5/8	371	5.9	280	100-2500	7-2 5/16x13 1/2	Y	Fu 5A43	5	Tim 58300H	SF	H	6.14-7.8	Shu 15785B	L4IHV	370	663	a	CD	51	8 1/4x3x 1/4	T
29	166	4070	121	219	28000	7800	10.00/20D	11.00/20	Con 42B	6-4 1/4x4 5/8	405	5.7	305	112-2500	7-2 5/16x13 1/2	Y	Fu 5A43	5	Wis 1337H	2F	R	5.63-8.59	Shu 15785B	L4IHV	459	772	a	CD	51	8 1/4x3x 3/4	T
30	170X	3640	153	219	25000	7960	9.00/20D	10.00/22	Con 33B	6-4 1/4x4 1/4	381	4.7	276	106-2600	7-2 1/4x13 1/4	Y	Fu 5-A-62	5	Tim 72300H	2F	R	5.78-7.35	Shu 15785B	L4IHV	370	663	a	CD	83 1/4	8 1/4x3x 1/4	T
31	175X	4290	153	219	30000	8550	9.00/20D	11.00/22	Con 34B	6-4 3/8x4 3/4	427	5.4	322	133-2600	7-2 1/4x13 1/4	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63-8.59	Shu 15785B	L4IHV	459	772	a	CD	83 1/4	8 1/4x3x 3/4	T
32	195X	4230	153	219	28000	8650	10.00/20D	11.00/22	Con 33B	6-4 1/4x4 3/4	381	4.7	276	106-2600	7-2 1/4x13 1/4	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63-8.59	Shu 15785B	L4IHV	459	772	a	CD	83 1/4	8 1/4x3x 3/4	T
33	220X	4930	153	219	34000	9050	11.00/20D	12.00/24	Con 34B	6-4 3/8x4 3/4	427	5.4	322	133-2600	7-2 1/4x13 1/4	Y	Fu 5-A-62	5	Wis 1757H	2F	R	6.06-8.82	Shu 15795B	L4IHV	536	899	a	CD	83 1/4	8 1/4x3x 3/4	T
34	240X	5130	153	219	30000	8590	10.00/20D	11.00/24	Con 35B	6-4 1/16x5 1/4	501	5.4	370	144-2400	7-2 1/4x13 1/4	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63-7.52	Shu 15785B	L4IHV	459	772	a	CD	83 1/4	8 1/4x3x 3/4	T
35	260X	6030	195	219	34000	9720	11.00/22D	12.00/24	Con 35B	6-4 1/16x5 1/4	501	5.4	370	144-2400	7-2 1/4x13 1/4	Y	Fu MHU	4	Wis 1757H	2F	R	6.06-8.82	Shu 15795B	L4IHV	536	899	a	CD	125 1/4	8 1/4x3x 3/4	T
36	260S	6380	195	219	36000	10000	11.00/24D	12.00/24	Con 35B	6-4 1/16x5 1/4	501	5.4	370	144-2400	7-2 1/4x13 1/4	Y	Fu MHU	4	Wis 1757H	2F	R	6.06-8.82	Shu 15795B	Lw4IDV	600	899	a	CD	125 1/4	8 1/4x3x 3/4	B
37	Chevrolet BK	528	115	115	4600	°2235	6.00/16S	15/6S	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	3	Own	Hy	U	** 4.11	Own	O4IH	161	242	a	2I	38 1/4	5 3/4x2 1/4x 1/4	C
38	BJ ▲1127	115	115	5000	°3665	6.00/16S	15/6S	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	3	Own	Hy	U	** 4.55	Own	O4IH	161	242	a	2I	.....	5 3/4x2 1/4x 1/4	C
39	BL 602	125	125	5200	°2400	15/6S	15/6S	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	Hy	H	** 4.55	Own	O4IH	161	242	a	2I	48 1/2	5 11/16x2 1/4x 1/4	C
40	BN ▲897	134	134	5800	°3770	7.00/17S	7.50/17-8S	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	Hy	H	** 4.55	Own	O4IH	195	297	a	2I	.....	7x2 1/4x 1/16	C
41	MR 668	134	134	7700	°2970	6.00/20S†	7.50/20-8S	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	5.43	Own	O4IH	329	478	a	2I	57 3/4	7x2 1/4x 1/16	C
42	MR 694	134	134	7700	°2975	6.00/20S†	7.50/20-8S	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	5.43	Own	O4IH	329	478	a	2I	57 3/4	7x2 1/4x 1/16	C
43	MR 691	134	134	9500	°3110	6.00/20D	7.50/20-8	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	57 3/4	7x2 1/4x 1/16	C
44	MR 717	134	134	9500	°3115	6.00/20D	7.50/20-8	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	57 3/4	7x2 1/4x 1/16	C
45	*MR 834	134	134	●13500	°3380	6.50/20D‡	7.50/20-8	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	Y	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	57 3/4	7x2 1/4x 1/16	C
46	*MR 860	134	134	●13500	°3385	6.50/20D‡	7.50/20-8	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	Y	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	57 3/4	7x2 1/4x 1/16	C
47	MS 694	160	160	7700	°3225	6.00/20S†	7.50/20-8S	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	5.43	Own	O4IH	329	478	a	2I	83 1/4	7x2 1/4x 1/16	P
48	MS 720	160	160	7700	°3230	6.00/20S†	7.50/20-8S	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	5.43	Own	O4IH	329	478	a	2I	83 1/4	7x2 1/4x 1/16	P
49	MS 717	160	160	9500	°3365	6.00/20D	7.50/20-8	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	83 1/4	7x2 1/4x 1/16	P
50	MS 743	160	160	9500	°3370	6.00/20D	7.50/20-8	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	83 1/4	7x2 1/4x 1/16	P
51	*MS 860	160	160	●13500	°3635	6.50/20D‡	7.50/20-8	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	Y	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	83 1/4	7x2 1/4x 1/16	P
52	*MS 886	160	160	●13500	°3640	6.50/20D‡	7.50/20-8	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	Y	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	83 1/4	7x2 1/4x 1/16	P
53	(c.o.e.) MU 788	109	109	7700	°3340	6.00/20S†	7.50/20-8S	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	5.43	Own	O4IH	329	478	a	2I	62 1/2	7x2 1/4x 1/16	C
54	(c.o.e.) MU 814	109	109	7700	°3345	6.00/20S†	7.50/20-8S	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	5.43	Own	O4IH	329	478	a	2I	62 1/2	7x2 1/4x 1/16	C
55	(c.o.e.) MU 811	109	109	9500	°3480	6.00/20D	7.50/20-8	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	62 1/2	7x2 1/4x 1/16	C
56	(c.o.e.) MU 837	109	109	9500	°3485	6.00/20D	7.50/20-8	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	62 1/2	7x2 1/4x 1/16	C
57	*(c.o.e.) MU 954	109	109	●13500	°3750	6.50/20D‡	7.50/20-8	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	Y	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	62 1/2	7x2 1/4x 1/16	C
58	*(c.o.e.) MU 980	109	109	●13500	°3755	6.50/20D‡	7.50/20-8	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	Y	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	62 1/2	7x2 1/4x 1/16	C
59	(c.o.e.) MV 813	132	132	7700	°3415	6.00/20S†	7.50/20-8S	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	5.43	Own	O4IH	329	478	a	2I	86	7x2 1/4x 1/16	C
60	(c.o.e.) MV 839	132	132	7700	°3420	6.00/20S†	7.50/20-8S	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	5.43	Own	O4IH	329	478	a	2I	86	7x2 1/4x 1/16	C
61	(c.o.e.) MV 836	132	132	9500	°3555	6.00/20D	7.50/20-8	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	86	7x2 1/4x 1/16	C
62	(c.o.e.) MV 862	132	132	9500	°3560	6.00/20D	7.50/20-8	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	86	7x2 1/4x 1/16	C
63	*(c.o.e.) MV 979	132	132	●13500	°3825	6.50/20D‡	7.50/20-8	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	Y	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	86	7x2 1/4x 1/16	C
64	*(c.o.e.) MV 1005	132	132	●13500	°3830	6.50/20D‡	7.50/20-8	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	Y	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	86	7x2 1/4x 1/16	C
65	(c.o.e.) MW 840	158	158	7700	°3645	6.00/20S†	7.50/20-8S	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	5.43	Own	O4IH	329	478	a	2I	111 1/2	7x2 1/4x 1/16	P
66	(c.o.e.) MW 866	158	158	7700	°3650	6.00/20S†	7.50/20-8S	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	5.43	Own	O4IH	329	478	a	2I	111 1/2	7x2 1/4x 1/16	P
67	D (c.o.e.) MW 863	158	158	9500	°3785	b.00/20D	7.50/20-8	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	111 1/2	7x2 1/4x 1/16	P
68	(c.o.e.) MW 889	158	158	9500	°3790	6.00/20D	7.50/20-8	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	N	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	111 1/2	7x2 1/4x 1/16	P
69	*(c.o.e.) MW 1006	158	158	●13500	°4055	6.50/20D‡	7.50/20-8	Own	6-3 1/16x3 3/4	216	6.5	174	90-3300	4-2 3/4x5 1/16	Y	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	111 1/2	7x2 1/4x 1/16	P
70	*(c.o.e.) MW 1032	158	158	●13500	°4060	6.50/20D‡	7.50/20-8	Own	6-3 1/16x3 11/16	235	6.6	192	93-3100	4-2 3/4x5 1/16	Y	Own	4	Own	HyF	H	** 6.17	Own	O4IH	329	478	a	2I	111 1/2	7x2 1/4x 1/16	P

† Rear 7.00/20 8-ply. ‡ Rear 7.50/20 8-ply. ● 14,000 lb. when truck is equipped with two-speed rear axle and 8.25/20 10 ply tires. ▲ Includes special panel body. ♦ Denotes new models or change in specifications.
* Governor set not to exceed 45 m.p.h. ° These are shipping weights and do not include weight of gasoline or water.

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Line Number	MAKE AND MODEL	Chassis List Price	WHEEL-BASE Minimum Standard	WHEEL-BASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES D-dual rear S-single rear Standard Front and Rear	TIRE SIZES Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings Number, Diameter and Length	Governor Standard	TRANSMISSION Make and Model	TRANSMISSION Forward Sp'ds	REAR AXLE Make and Model	REAR AXLE Gear and Type	REAR AXLE Drive & Torque	REAR AXLE Gear Ratio Range in High	FRONT AXLE Make and Model	BRAKES SERVICE Make Location Type Operat'n	BRAKES SERVICE Lining Area	BRAKES SERVICE Drum Area	BRAKES SERVICE Drum Material	BRAKES Hand Location Type	C-A Dimension (Min. Std. W. B.)	FRAME Side Rail Dimensions	FRAME Type
1	Federal (●) 8	595	102	128	7000	2500	6.00/16S	7.50/17S	Her QXB3F	6–3¼x4½	205	5.9	144	66–3500	7–2½x10	N	WG-T9	4	Tim 51521H	SF	H	4.11-4.86	Tim 29500H	L4IH	210	308	a	TX	34½	6x2¾x¼	T
2	(6).....16	745	135	250	13000	3960	6.00/20S	7.50/20	Her JXFF	6–3⅜x4¼	232	6.1	164	75–3000	7–2½x10	N	WG T9	4	Tim 53547H	SF	H	5.14–6.66	Tim 30000H	L4IH	299	478	a	TX	56¾	8¼x2½x¼	T
3	(6).....17	870	135	250	14000	4250	6.00/20†S	8.25/20	Her JXGF	6–3½x4¼	245	5.7	174	79–3000	7–2½x10	Y	WG T9	4	Tim 53308H	SF	H	5.14–6.66	Tim 30000H	L4IH	299	478	a	TX	56¾	8¼x2½x¼	T
4	(6).....18	1045	135	250	15000	4350	6.00/20D	8.25/20	Her JXBF	6–3¾x4¼	263	6.1	187	82–3000	7–2½x10	Y	WG T9	4	Tim 53308H	SF	H	5.83–6.80	Tim 31000H	L4IHV	330	578	a	TX	56¾	8¼x2½x¼	T
5	(6).....20	1245	135	250	17500	4850	6.50/20D	9.00/20	Her JXBF	6–3⅝x4¼	263	6.1	187	82–3000	7–2½x10	Y	Cla 185F	4	Tim 55411H	SF	H	5.71–7.40	Tim 31000H	L4IHV	330	578	a	TX	56¾	8¼x2½x¼	T
6	(6).....25	1545	135	250	19000	5200	7.00/20D	9.00/20	Her JXCF	6–3¾x4¼	282	5.9	208	85–2900	7–2½x10	Y	Cla 205V	5	Tim 56411H	SF	H	5.71–7.40	Tim 32514H	L4IHV	415	735	a	TX	56¾	8¼x2⅙x¾	T
7	(6).....29	1960	135	250	20000	5900	7.50/20D	10.00/20	Her JXDF	6–4x4¼	320	5.9	244	95–2800	7–2½x10	Y															
8	(6).....35	2495	140	255	22500	6700	8.25/20D	10.00/20	Her WXC3	6–4¼x4½	383	6.1	285	114–2800	7–2⅝x13¼	Y	Cla 205V	5	Tim 56411H	SF	H	5.71–7.40	Tim 32515H	L4IHV	415	735	a	TX	57	10¼x3¾x¼	T
9	(6).....45	3145	140	255	24000	7300	9.00/20D	11.00/24	Her WXLC3	6–4¼x4½	404	6.3	307	125–2800	7–2⅝x13¼	Y	Cla 270V	5	Tim 57543H	2F	R	7.00–9.50	Tim 35011H	L4IHV	504	844	a	PD	57	10¼x3¾x¼	T
10	(6).....55	3695	140	255	28000	8000	9.00/20D	11.00/24	Her WXLC3	6–4¼x4½	404	6.3	307	125–2800	7–2⅝x13¼	Y	Cla 326VO	5	Tim 76810W	2F	R	6.07–10.42	Tim36000TW	Ws41A	620	921	a	TD	57	10¼x3¾x¼	TF
11	62	5945	141	211	35000	10400	11.00/20D	12.00/24	Con 22RF	6–4½x5¼	501	5.2	400	150–2300	7–2¾x14½	N	WG T9	4	Tim 53547H	SF	H	5.14–6.66	Tim 31100H	L4IH	299	478	a	TX	60	8¼x2½x¼	T
12	(6) ···(c.o.e.) 76	855	104	215	13000	4000	6.00/20S	7.50/20	Her JXFF	6–3⅜x4¼	232	6.1	164	75–3000	7–2½x10	Y	WG T9	4	Tim 53308H	SF	H	5.14–6.66	Tim 31100H	L4IH	299	478	a	TX	60	8¼x2½x¼	T
13	(6) ···(c.o.e.) 77	980	104	215	14000	4300	6.00/20†S	8.25/20	Her JXGF	6–3½x4¼	245	5.7	174	79–3000	7–2½x10	Y															
14	(6)....(c.o.e.) 80	1355	104	215	17500	4900	6.50/20D	9.00/20	Her JXBF	6–3⅝x4¼	263	6.1	187	82–3000	7–2¼x10	Y	WG T9	4	Tim 54411H	SF	H	5.83–6.80	Tim 31102H	L4IHV	330	578	a	TX	60	8¼x2⅙x¼	T
15	(6)....(c.o.e.) 85	1665	104	215	19000	5250	7.00/20D	9.00/20	Her JXCF	6–3¾x4¼	282	5.9	208	85–2900	7–2½x10	Y	Cla 185F	4	Tim 55411H	SF	H	5.71–7.40	Tim 32515H	L4IHV	374	654	a	TX	60	8¼x2⅙x¼	T
16	(6)....(c.o.e.) 89	2055	104	215	20000	5950	7.50/20D	10.00/20	Her JXDF	6–4x4¼	320	5.9	244	95–2800	7–2½x10	Y	Cla 205V	5	Tim 56411H	SF	H	5.71–7.40	Tim 32515H	L4IHV	415	735	a	TX	60	8¼x2⅙x¼	T
17	(6)....(c.o.e.) 90	2695	116	173	22500	6600	8.25/20D	10.00/20	Her WXC3	6–4¼x4½	383	6.1	285	114–2800	7–2⅝x13¼	Y	Cla 205V	5	Tim 56411H	SF	H	5.71–7.40	Tim 35011H	L4IHV	415	735	a	TX	72	10x3½x¼	T
18	(6)....(c.o.e.) 92	3320	116	173	24000	7200	9.00/20D	11.00/24	Her WXLC3	6–4¼x4½	404	6.3	307	125–2800	7–2⅝x13¼	Y	Cla 270V	5	Tim 58301H	SF	H	5.57–7.80	Tim 35011H	L4IHV	504	844	a	TX	72	10x3½x¼	T
19	(6)....(c.o.e.) 94	3845	116	173	28000	7900	9.00/20D	11.00/24	Her WXLC3	6–4¼x4⅝	404	6.3	307	125–2800	7–2⅝x13¼	Y	Cla 270V	5	Tim 75743H	2F	R	7.00–9.50	Tim 35011H	L4IHV	504	844	a	PD	72	10x3½x¼	T
20	Ford Reg...21T-81		134	134	.....	.....	6.00/20†S	8.25/20-10	Own	8–3⅛x3¾	221	5.9	156	90–3800	3–2.25x5.65	N	Own O1T	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	60.06	7x2.75x.21	CTf
21	...Reg...2GT-81		134	134	.....	.....	6.00/20†S	8.25/20-10	Own	6–3.3x4.4	226	6.7	180	90–3300	4–2.5x5.77	N	Own 1GT	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	60.06	7x2.75x.21	CTf
22	...Reg...29T-81		134	134	.....	.....	6.00/20†S	8.25/20-10	Own	8–3⅛x3¾	239	6.4	176	100–3800	3–2.25x5.65	N	Own O1T	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	84.06	7x2.75x.21	CTf
23	...Reg..218T-81		158	158	.....	.....	6.00/20†S	8.25/20-10	Own	8–3⅛x3¾	221	5.9	156	90–3800	3–2.25x5.65	N	Own O1T	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	84.06	7x2.75x.21	CTf
24	...Reg.2G8T-81		158	158	.....	.....	6.00/20†S	8.25/20-10	Own	6–3.3x4.4	226	6.7	180	90–3300	4–2.5x5.77	N	Own 1GT	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	84.06	7x2.75x.21	CTf
25	...Reg..298T-81		158	158	.....	.....	6.00/20†S	8.25/20-10	Own	8–3⅛x3¾	239	6.4	176	100–3800	3–2.25x5.65	N	Own O1T	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	84.06	7x2.75x.21	CTf
26	.(c.o.e.) 211W-81		101	101	.....	.....	6.00/20†S	8.25/20-10	Own	8–3⅛x3¾	221	5.9	156	90–3800	3–2.25x5.65	N	Own O1T	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	59.60	7x2.75x.21	CTf
27	.(c.o.e.) 291W-81		101	101	.....	.....	6.00/20†S	8.25/20-10	Own	8–3⅛x3¾	239	6.4	176	100–3800	3–2.25x5.65	N	Own O1T	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	59.60	7x2.75x.21	CTf
28	.(c.o.e.) 21W-81		134	134	.....	.....	6.00/20†S	8.25/20-10	Own	8–3⅛x3¾	221	5.9	156	90–3800	3–2.25x5.65	N	Own O1T	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	92.93	7x2.75x.21	CTf
29	.(c.o.e.) 29W-81		134	134	.....	.....	6.00/20†S	8.25/20-10	Own	8–3⅛x3¾	239	6.4	176	100–3800	3–2.25x5.65	N	Own O1T	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	92.93	7x2.75x.21	CTf
30	.(c.o.e.) 218W-81		158	158	.....	.....	6.00/20†S	8.25/20-10	Own	8–3⅛x3¾	221	5.9	156	90–3800	3–2.25x5.65	N	Own O1T	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	117.0	7x2.75x.21	CTf
31	.(c.o.e.) 298W-81		158	158	.....	.....	6.00/20†S	8.25/20-10	Own	8–3⅛x3¾	239	6.4	176	100–3800	3–2.25x5.65	N	Own O1T	4	Own	FS	H	5.14–6.67	Own	O4IH	303	506	A	TX	117.0	7x2.75x.21	CTf
32	...1 Ton 21Y-81		122	122	.....	.....	6.00/17‡S	7.50/17	Own	8–3⅛x3¾	221	6.2	156	90–3800	3–2.25x5.65	N	Ow {1IY-21Y}	3	Own	FS	H	4.86–	Own	O4IH	187	308	A	2I	48.06	6x2.25x.19	CTf
33	...1 Ton 2GY-81		122	122	.....	.....	6.00/17‡S	7.50/17	Own	6–3.3x4.4	226	6.7	180	90–3300	4–2.5x5.77	N	Ow {1GY-2GY}	3	Own	FS	H	4.86–	Own	O4IH	187	308	A	2I	48.06	6x2.25x.19	CTf
34	...1 Ton 2NY-81		122	122	.....	.....	6.00/17‡S	7.50/17	Own	4–3⅛x3¾	120	6.0	84	40–3200	3–2.25x4.86	N	Ow ONY	4	Own	FS	H	-6.67	Own	O4IH	187	308	A	2I	48.06	6x2.25x.19	CTf
35	...¾ Ton 21D-81		122	122	.....	.....	6.50/16°S	7.00/16	Own	8–3⅛x3¾	221	6.2	156	90–3800	3–2.25x5.65	N	Ow {1IY-21Y}	3	Own	FS	H	4.86–	Own	O4IH	163	264	A	2I	48.06	6x2.25x.19	CTf
36	...¾ Ton 2GD-81		122	122	.....	.....	6.50/16°S	7.00/16	Own	6–3.3x4.4	226	6.7	180	90–3300	4–2.5x5.77	N	Ow {1GY-2GY}	3	Own	FS	H	4.86–	Own	O4IH	163	264	A	2I	48.06	6x2.25x.19	CTf
37	...¾ Ton 2ND-81		122	122	.....	.....	6.50/16°S	7.00/16	Own	4–3⅛x3¾	120	6.0	84	40–3200	3–2.25x4.86	N	Ow ONY	4	Own	FS	H	-6.67	Own	O4IH	163	264	A	2I	40.06	5.92x2.25x.15	CTf
38	Com. Car 21C-81		114	114	.....	.....	6.00/16S	6.50/16	Own	8–3⅛x3¾	221	6.2	156	90–3800	3–2.25x5.65	N	Ow {2CIA-01A}	3	Own	S¾	H	3.78–4.11	Own	O4IH	163	264	A	2I	40.06	5.92x2.25x.15	CTf
39	Com. Car 2GC-81		114	114	.....	.....	6.00/16S	6.50/16	Own	6–3.3x4.4	226	6.7	180	90–3300	4–2.5x5.77	N	Ow {2GC8}	3	Own	S¾	H	3.78–4.11	Own	O4IH	163	264	A	2I	40.06	5.92x2.25x.15	CTf
40	Com. Car 2NG-81		114	114	.....	.....	6.00/16S	6.50/16	Own	4–3⅛x3¾	120	6.0	84	40–3200	3–2.25x4.86	N	Ow2NCA-2NC 8	3	Own	S¾	H	4.55–	Own	O4IH	163	264	A	2I	40.06	5.92x2.25x.15	CTf
41	Gramm 11A	730	131	155	6500	2850	7.00/16S	7.50/16S	Her QXB3G	6–3¼x4½	205	5.8	144	66–3500	7–2½x10	N	WG T8S	3	Spi 51-1	S	H	**-5.10	Spi 50-1	L4IH	218	328	a	TX	60½	7x2¼x⅞	T
42	(9).....21A	785	131	155	10000	3000	6.00/20S	32x6–8p	Her QXB3G	6–3¼x4½	205	5.8	144	66–3500	7–2½x10	N	WG T9	4	Cla R650	SF	H	4.62–6.17	Cla F182	L4IH	212	352	a	TX	60½	7x2¼x⅞	T
43	(9).....31A	870	131	227	12000	3300	6.00/20S	32x6–8p	Her QXC3G	6–3⅝x4½	221	5.9	154	67–3000	7–2½x10	N	Cla R750	5	Tim 53308H	SF	H	5.83–6.80	Tim 31000H	L4IHV	330	578	a	TX	60½	8¼x2½x¼	T
44	(9).....41A	930	131	227	14000	3750	6.00/20S	8.25/20	Her QXC3G	6–3⅝x4½	221	5.9	154	67–3000	7–2½x10	N	WG T9	4	Tim 53300	SF	H	5.14–6.66	Tim 30000H	L4IH	299	478	a	TX	60½	7½x2¾x¾	T
45	(9).....46A	1150	131	227	14000	3900	6.00/20S	8.25/20	Her JXBG	6–3¾x4¾	263	6.1	187	82–3000	7–2½x10	N	WG T9A	4	Tim 53300	SF	H	4.57–6.20	Tim 30000H	L4IH	252	402	a	TX	60½	7½x2¾x¾	T
46	(9).....56A	1360	131	227	15000	4700	6.50/20D	8.25/20	Her JXBG	6–3¾x4¾	263	6.1	187	82–3000	7–2½x10	N	WG T9A	4	Tim 54411	SF	H	4.12–6.80	Tim 31000H	L4IHV	334	578	a	TX	60½	10x2¾x⅞	P
47	(9).....71A	1675	131	227	17000	5200	7.00/20D	9.00/20	Her JXCG	6–3¾x4¾	282	5.9	208	85–2900	7–2¼x10	N	Cla 200V	5	Tim 55411	SF	H	5.71–7.40	Tim 31000H	L4IHV	334	578	a	TX	60½	10x2¾x⅞	P
48	(9).....76A	1990	131	227	19000	5400	7.00/20D	9.75/20	Her JXDG	6–4x4¼	320	5.9	244	95–2800	7–2½x10	N	Cla 200V	5	Tim 56411	SF	H	4.44–7.40	Tim 32500H	L4IHV	334	578	a	TX	60½	10x2¾x⅞	P
49	(9).....86A	2305	131	227	21500	5700	7.50/20D	10.50/20	Her JXDG	6–4x4¼	320	5.9	244	95–2800	7–2½x10	N	Cla 200V	5	Tim 58300	SF	H	5.25–7.80	Tim 33000H	L4IHV	380	660	a	TX	60½	12x2¾x⅞	P
50	(9).....96A	3565	131	227	28000	8000	9.00/20D	10.50/20	Her WXLC3	6–4¼x4¾	404	5.9	294	118–2800	7–2⅝x10	Y	Cla 270V	5	Wis 1337H	2F	H	5.63–8.59	Tim 35000H	L4IHV	474	768	a	TX	60½	7½x2¾x¾	T
51	(D) (9)....D46A	2545	131	227	14000	4100	6.00/20S	8.25/20	Her DJXB	6–3½x4½	260	14.	178	77–2600	7–3x10	Y	Cla 185F	4	Tim 54411	SF	H	4.12–6.80	Tim 31000H	L4IHV	334	578	a	TX	60½	10x2¾x⅞	T
52	(D) (9)....D56A	2750	131	227	15000	4900	6.50/20D	8.25/20	Her DJXB	6–3½x4½	260	14.	178	77–2600	7–3x10																
53	(D) (9)....D71A	3020	131	227	17000	5400	7.00/20D	9.00/20	Her DJXC	6–3¼x4½	298	14.	194	84–2600	7–3x10	Y	Cla 200V	5	Tim 55411	SF	H	5.72–6.29	Tim 31000H	L4IHV	334	578	a	TX	60½	10x2¾x⅞	P
54	(D) (9)....D76A	3410	131	227	19000	5700	7.00/20D	9.75/20	Bud 6DT31	6–3⅝x5½	317	14.	224	90–2300	7–3x9½	Y	Cla 200V	5	Tim 56411	SF	H	4.44–7.40	Tim 32500H	L4IHV	334	578	a	TX	60½	10x2¾x⅞	P
55	(D) (9)....D86A	4445	131	227	21500	6000	7.50/20D	10.50/20	Bud 6DT38	6–3½x5½	389	14.	284	96–2100	7–3x12½	Y	Cla 270V	5	Tim 58300	SF	H	5.25–6.83	Tim 33000H	L4IHV	380	660	a	TX	60½	12x2¾x⅞	P
56	(D) (9)....D96A	5330	131	227	28000	8100	9.00/20D	10.50/20	Bud 6DT38	6–3½x5½	389	14.	284	96–2100	7–3x12½	Y	Cla 270V	5	Wis 1337H	2F	H	5.63–8.59	Tim 35000H	L4IHV	474	768	a	TX	60½	12x2¾x⅞	P
57	.....GF	5775	150	225	24000	9050	9.75/20D	10.50/20	Her HXC	6–5¼x6	779	4.5	505	143–1600	7–3½x17	N	BL 744	4	Wis 1337H	2F	H	4.29*7.2	Tim 33009	L4IHV	474	768	a	TD	67	12x2½x¼	TP
♦ 58	Hug.....85W	**	125	125	23000	7150	8.25/20D	9.00/20	Wau 6BZ	6–4x4¼	320	5.7	210	83–2500	7–2¼x10	Y	Fu 5B33	5	Cla R1300	SF	H	**-7.16	Shu 632	L4IHV	442	689	a	TD	72	7x3¾x⅛	I
♦ 59	.....87W	**	134	134	31000	9540	11.00/20D	11.00/20	Wau 6MZR	6–4¼x4¾	404	5.3	286	95–2200	7–2⅝x12½	Y	Fu 5A43	5	Wis 1757	2F	T	**-9.2	Shu 647	L4IHV	548	867	a	TD	84	8x4⅜x⅛	I
♦ 60	.....92U	**	134	134	37000	11600	11.00/24D	12.00/24	Wau6SRKR	6–4½x5½	517	4.5	365	125–2200	7–3x13¼	Y	Fu 5A62	5	Wis 79746	2F	T	**-10.2	Shu 678	Ws41A	760	1190	a	TD	84	8x4⅜x⅛	I
♦ 61	.....(D) D92U	**	134	134	37000	12065	11.00/24D	12.00/24	Her DRXB	6–4½x6	448	17.	370	100–1800	5–4½x11	Y	Fu 5A62	5	Wis 79746	2F	T	**-10.2	Shu 678	Ws41A	760	1190	a	TD	84	8x4⅜x⅛	I
♦ 62	98	**	171	171	47500	13615	12.00/24D	14.00/24	Wau 6RBR	6–5x5¾	677	5.3	480	144–1800	4–3½x11	Y	Fu 8A86	8	Tim 79746	2F	T	**-10.2	Shu 1673	Ws41A	760	1190	a	TD	90	9x4⅜x⅛	I
♦ 63	.....(D) D98	**	171	171	47500	13615	12.00/24D	14.00/24	Cum HB600	6–4⅞x6	672	17.	500	150–1800	7–4½x16½	Y	Fu 8A86	8	Tim 79746	2F	T	**-10.2	Shu 1673	Ws41A	760	1190	a	TD	90	9x4⅜x⅛	I
64	International (11)																														
♦ 65	.....K-1	550	113	125	4400	2190	6.00/16S	7.00/16S	O-GRD 214	6–3⅛x4½	213	6.3	160	82–3400	4–2⅝x6	N	O HDS	3	Own R1050	S½	H	3.72–5.11	Own F50	L4IH	164	316	s	2I	38	6x2¼x½	T
♦ 66	.....K-1-M	560	102	113	4600	2090	6.00/16S	7.00/16S	O-GRD 214A	6–3⅛x4½	213	6.3	160	82–3400	4–2⅝x6	Y	O 8AHDSA	3	Own R1050	S½	H	3.72–5.11	Own F150	L4IH	164	316	s	TX	.....	6½x2¼x⅛	T
♦ 67	.....K-2	580	125	...	5200	2225	6.00/16S	7.00/16S	O-GRD 214	6–3⅛x4½	213	6.3	160	82–3400	4–2⅝x6	N	O HDS	3	Own R1050	S½	H	3.72–5.11	Own F50	L4IH	164	316	s	2I	50	6x2¼x½	T
♦ 68	.....K-3	680	113	130	6650	2940	7.00/16S	6.50/16	O-GRD 214	6–3⅛x4½	213	6.3	160	82–3400	4–2⅝x6	N	O HDSA	3	Own R1150	SF	H	4.22–5.28	Own F150	L4IH	195	367	s	2I	38	6½x2½x⅛	T
♦ 69	.....K-3-M	670	102	113	7000	2525	7.00/16S	7.50/16S	O-GRD 214A	6–3⅛x4½	213	6.3	160	82–3400	4–2⅝x6	Y	O 8HDSA	3	Own R1150	SF	H	4.87–6.50	Own F260	L4IH	221	367	s	TX	.....	6½x2¼x⅛	T
♦ 70	(a).....K-4	710	113	159	10000	3175	32x6S	7.50/20	O-GRD 214	6–3⅛x4½	213	6.3	160	82–3400	4–2⅝x6	N	O H41B	4	Own R1360	SF	H	5.28–6.66	Own F350	LH4IH	294	509	c	TX	60	8x3x⅛	T
♦ 71	(a).....K-5	770	135	177	13500	3585	6.00/20D	8.25/20	O-GRD 233	6–3⅞x4½	233	6.3	181	93–3400	4–2⅝x6	N	O H41C	4	Own R1450	SF	H	5.62–7.16	Own F470	LH4IHV	305	539	c	TX	60	8¼x3x⅜	T
♦ 72	(a).....K-6	1125	134	176	14500	4380	6.50/20D	8.25/20	O-BLD 250	6–3⅞x4½	251	6.3	200	100–3200	4–2.7x5																

† Rear 6.50/20. * Rear 7.00/16. ‡ Rear 7.00/17 6-ply. ± Rear 32x6 single. ♦ Denotes new models or change in specifications. (●) Federal—Chassis weight shown is for average chassis without cab and complete with average size tires, tools, spare rim, fuel, oil and water. § Fingertip shifting on steering. ** Prices not available.

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Line Number	MAKE AND MODEL	Chassis List Price	WHEELBASE Minimum Standard	WHEELBASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	TIRE SIZES: Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Sp'ds	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES SERVICE: Make Location Type Operat'n	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimension (Min. Std. W. B.)	FRAME: Side Rail Dimensions	Type
	Truckstell—(Cont)																													
1	(C)TRC-35BMO	2881	109	158	.....	5450	7.50/20D	8.25/20D	Chev▲	6–3 7/8 x3 1/2	235	6.6†	192	93–3000	4–2 1/2x5 1/8	N	Cla	4	Chev 2	SF	H	5.64–8.22	Chev	O4IHV	330	478	a	2I	62 1/2	7x2 3/4x 7/8	C
2	(C)TRC-40BM	3353	134	160	.....	5500	7.50/20D	9.00/20D	Chev▲	6–3 7/8 x3 1/2	235	6.6†	192	93–3000	4–2 3/4 x5 1/8	N	Cla	4	Eat 1475	SF	H	6.50–9.02	Chev	O4IHV	330	478	a	2I	57 3/4	7 1/2x3x 1/2	CC
3	(C)TRC-40BMO	3462	109	158	.....	5650	7.50/20D	9.00/20D	Chev▲	6–3 7/8 x3 1/2	235	6.6†	192	93–3000	4–2 3/4 x5 1/8	N	Cla	4	Eat 1475	SF	H	6.50–9.02	Chev	O4IHV	330	478	a	2I	62 1/2	7 1/2x3x 1/2	C
4	Ward La Fr...125	3654	187	200	21000	8000	9.00/20D	9.75/20	Wau MZR	6–4 1/4 x4 1/4	404	5.7	305	112–2600	7–2 5/8x12 1/2	Y	Fu 5A430	5	Tim 58300H	SF	R	5.25–7.8	Tim 33000H	L4IHV	389	694	a	TD	108 1/2	12x3 1/4	P
5	131	4460	204	215	26000	8500	9.75/20D	10.50/20	Wau MZR	6–4 1/4 x4 1/4	404	5.7	305	112–2600	7–2 5/8x12 1/2	Y	Fu 5A430	5	Wis 1337H	2F	R	5.60–9.4	Tim 35000H	L4IHV	448	772	a	CD	125	12x3 1/4	T
6	136	4961	204	215	26000	8700	9.75/20D	10.50/20	Wau SRLR	6–4 1/8 x5 1/8	462	5.0	332	112–2400	7–3x13 1/2	Y	Fu 5A430	5	Wis 1337W	2F	R	5.60–9.4	Tim 35000H	L4IHV	448	772	a	CD	125	12x3 1/4	T
7	156	6250	156	218	36000	10000	10.50/20D	11.25/24	Wau SRLR	6–4 1/8 x5 1/8	462	5.0	332	112–2400	7–3x13 7/8	Y	Fu 5A430	5	Wis 1757W	2F	R	6.00–9.2	Tim 26452TW	Ws4IA	544	867	a	CD	77 1/2	12x3 1/4	T
8	.....156S	6450	156	218	40000	10500	10.50/20D	12.00/24	Wau SRKR	6–4 1/8 x5 1/8	517	5.0	365	126–2400	7–3x13 7/8	Y	Fu 5A620	5	Wis 1910W	2F	R	7.10–10.0	Tim26452TW	Ws4IA	544	867	a	CD	77 1/2	12x3 1/4	T
9	201	7591	156	218	40000	10000	10.50/20D	11.25/24	Wau GAK	6–5 1/2x5 1/2	784	...	550	150–3000	7–	Y	Fu 4A86	..	Wis 1910W	2F	R	7.10–10.0	Tim26452TW	Ws4IA	544	595	a	CD	77 1/2	3 1/4x12	
10	.....55RH	5350	156	218	36000	10000	10.50/20D	11.25/24	Wau SRKR	6–4 1/8 x5 1/8	517	5.0	365	126–2400	7–3x13 7/8	Y	Fu 5A620	5	Tim 76793H	2F	R	6.00–9.20	Tim26482H	L4IHV	488	1293	a	CD	77 1/2	3 1/4x12	T
11	.....(D) 127D	5655	187	215	21000	8500	9.00/20D	9.75/20	Cum AA6	6–4x5	377	14.	270	100–2200	7–4 1/2x11 1/2	Y	Fu 5A430	5	Tim 58300H	SF	R	5.25–7.80	Tim 33000H	L4IHV	389	1221	a	TD	108 1/2	3 1/4x12	T
12	.....(D) 138D	7414	204	215	26000	10000	9.75/20D	10.50/20	Her DRXB	6–4 1/2 x5 1/4	474	14.	350	120–2000	7–3x13 7/8	Y	Fu 5A620	5	Wis 1337TW	2F	R	5.60–9.40	Tim35000TW	Ws4IA	507	872	a	CD	125	3 1/4x12	T
13	.....(D) 156D	8159	156	218	36000	10400	10.50/20D	11.25/24	Her DRXB	6–4 1/2 x5 1/4	474	14.	350	120–2000	7–3x13 7/8	Y	Fu 5A620	5	Wis 1757KW	2F	R	6.00–9.20	Tim26452TW	Ws4IA	544	595	a	CD	77 1/2	3 1/4x12	T
14	.....(D) 176D	8259	156	230	36000	10900	10.50/20D	11.25/24	Cum HB600	6–4 1/2 x6	672	17	500	150–1800	7–4 1/2x16 1/2	Y	Fu 4A86	8	Wis 1757W	2F	R	6.00–9.2	Tim 26452TW	Ws4IA	544	867	a	CD	77 1/2	12x3 1/4	T
15	.....(D) 201D	8591	156	218	40000	11500	10.50/20D	11.25/24	Cum HB600	6–4 1/2 x6	672	17	500	150–1800	7–4 1/2x16 1/2	Y	Fu 4A86	4	Wis 1910W	2F	R	7.1–10.00	Tim 26452TW	Ws4IA	544	867	a	CD	77 1/2	12x3 1/4	T
16	.....(c.o.e.) H	4250	132	Opt	23000	8800	9.00/20D	10.50/24	Wau MZR	6–4 1/4 x4 1/4	404	5.7	305	112–2600	7–2 5/8x12 1/2	Y	Fu 5A430	5	Tim 58300H	SF	R	5.25–7.8	Shu 672B1	L4IHV	389	758	a	CD	106	12x3 1/4	T
17	.....(c.o.e.) K	5643	146	Opt	28000	9500	9.75/20D	10.50/24	Wau SRLR	6–4 1/8 x5 1/8	462	5.0	332	112–2400	7–3x13 1/2	Y	Fu 5A620	5	Wis 1337 H	2F	R	5.6–9.4	Shu 672B1	L4IHV	448	867	a	CD	122	12x3 1/4	T
18	.....(c.o.e.) L	6651	146	Opt	36000	10000	10.50/20D	11.25/24	Wau SRKR	6–4 1/8 x5 1/8	517	5.0	365	126–2400	7–3x13 7/8	Y	Fu 5A620	5	Wis 1757W	2F	R	6.00–9.2	Shu 673B12	Ws4IA	544	867	a	CD	122	12x3 1/4	T
19	.....(c.o.e.) J	4893	132	Opt	28000	9000	9.75/20D	10.50/20	Wau MZR	6–4 1/4 x4 1/4	404	5.7	305	112–2600	7–2 5/8x12 1/2	Y	Fu 5A430	5	Wis 1337H	2F	R	5.60–9.40	Shu 672B1	L4IHV	448	515	a	CD	106	3 1/4x12	T
20	.....(c.o.e.) LD	8209	146	Opt	36000	11000	10.50/20D	11.25/24	Cum HB600	6–4 1/2 x6	672	17.	500	150–1800	7–4 1/2x16 1/2	Y	Fu 4A86	5	Wis 1757W	2F	R	6.00–9.20	Shu 673B12	Ws4IA	544	595	a	TD	122	3 1/4x12	T
21	.....(c.o.e.) MD	8951	146	Opt	40000	12500	10.50/20D	11.25/24	Cum HB600	6–4 1/2 x6	672	17.	500	150–1800	7–4 1/2x16 1/2	Y	Fu 4A86	5	Wis 1910W	2F	R	7.10–10.0	Shu 673B12	Ws4IA	544	595	a	TD	122	3 1/4x12	T
22	Warford.(C) DC-2	2875	163	200	26500	6200	32x6D	8.25/20	Ford V-8	8–3 1/8 x3 3/4	221	6.1	156	90–3800	3–2.5x4.7	N	Ford Own	8	Ford	SF	A	6.67	Ford	6IHV	501	712	A	FX	89	7 1/2x3x 1/2	C
23	.....(C) WC-2	2875	163	204	26500	6100	32x6D	8.25/20	Chev.	6–3 1/2 x3 3/4	217	6.5	174	90–3200	4–2 3/4 x5 1/8	N	Chev. Own	8	Chev.	HY	A	6.17	Chev.	6IHV	545	710	A	4I	86 3/4	7 1/2x3x 1/2	CC
24	.....(C) DC-1	2875	163	200	30000	6400	7.50/20D	8.25/20	Ford V-8	8–3 1/8 x3 3/4	239	6.1	176	100–3600	3–2.5x4.7	N	Ford Own	8	Ford	SF	A	6.67	Ford	6IHV	501	712	A	FX	89	7 1/2x3x 1/2	C
25	.....(C) WC-1	2875	163	204	30000	6300	7.50/20D	8.25/20	Chev.	6–3 7/8 x3 1/2	235	6.6	192	93–3200	4–2 3/4 x5 1/8	N	Chev. Own	8	Chev.	HY	A	6.17	Chev.	6IHV	545	710	A	4I	86 3/4	7 1/2x3x 1/2	C
26	Willys..(18) SC442	410	104	104	3700	1285	5.50/16S	6.00/16S	Own 442	1 3 1/2x4 1/2	134	6.1	106	61–3800	3–2.3x5.5	N	WG T84G	3	Sal 21-1	S	H	4.82	Own 442	B4IH	155	220	a	2I	32 1/2	4 1/4x1 1/4x 1/4	KX
27	.(18) SCOF442P	(18)	104	104	3900	1285	6.00/16S	(18)	Own 442P	4–3 1/4x4 1/2	134	6.1	106	61–3800	3–2.3x5.5	Y	WG T84G	3	Sal 21-1	S	H	4.82	Own 442P	B4IH	155	220	a	2I	.....	4 1/4x1 1/4x 1/4	KX
	Four-Wheel-Drive																													
28	Corbitt...(10) F-12	2375	Opt	Opt	12500	4460	6.50/20D	8.25/20	Con A6244	6–3 1/4 x4 1/4	244	5.4	170	83–3200	4–2 1/4x6 1/4	N	WG T9	8	Tim 53521H	SF	H	5.14–6.6	Wis F30B	L4IH	270	452	a	TX	Opt	7 1/4x3 1/4x 1/4	T
29	.....(10) F-14	3200	Opt	Opt	14500	5060	7.50/20D	8.25/20	Con M6271	6–3 1/8 x4 1/8	271	5.7	191	85–2900	7–2 1/4x12 1/8	N	Cla B116C	8	Tim 54411H	SF	H	5.83–6.8	Wis F544B	L4IH	335	578	a	TD	Opt	8x3 1/4x1/4	T
30	.....(10) F-18	4500	Opt	Opt	18500	6900	8.25/20D	9.00/20	Con B6371	6–4 1/4 x4 1/8	371	5.7	280	100–2650	7–2 1/4x13 1/2	N	Fu 5A43	10	Wis 5002L	2F	H	6.60–8.21	Wis F551H	L4IHV	335	578	a	TD	Opt	8x3 1/2x1/4	TT
31	.....(10) F-19	4300	Opt	Opt	19500	6500	8.25/20D	9.00/22	Con M-6330	6–4x4 1/2	330	5.5	238	103–3000	7–2 1/4x12 1/8	Y	Fu 5A330	10	Wis 5002L	2F	H	6.62–8.21	Wis F551H	L4IHV	534	785	a	TD	Opt	8 1/4x3 1/2x 1/4	TT
32	.....(10) F-23	5500	Opt	Opt	23500	9000	9.00/20D	9.75/22	Con 20-R	6–4 1/4 x4 3/8	381	4.8	276	106–2600	7–2 3/4 x13 1/8	N	Fu 5A620	10	Wis 72300H	2F	H	5.60–8.59	Wis F313H	L4IHV	625	976	a	TD	Opt	12 1/4x3 1/4x 1/4	TT
33	.....(10) F-27	6800	Opt	Opt	27500	10000	9.75/22D	10.50/22	Con 21-R	6–4 1/2 x4 3/8	428	5.0	325	125–2400	7–2 3/4 x13 1/8	N	Fu 5A620	10	Wis 1337BH	2F	H	6.36–8.59	Wis F313H	L4IHV	625	976	a	TD	Opt	12 1/4x3 1/4x 1/4	TT
34	.....(10) F-35	8500	Opt	Opt	35500	12500	10.50/20D	11.25/24	Con 22-R	6–4 1/2 x5 1/4	501	5.9	400	150–2200	7–2 5/8x12 1/8	N	Fu 5A620	10	Wis 1737KW	2F	H	6.39–9.16	Wis F417KW	Ws4IA	701	976	a	TD	Opt	12 1/4x3 1/4x 1/4	TT
♦ 35	F. W. D.....H8	*°2960	132	156	15000	z6600	7.00/20D	8.25/20	Wau BK	6–3 3/4 x4 1/4	282	6.0	189	84–2800	7–2 1/4x10 1/4	Y	Fu 5B33	5	Own H8	SF	H	7.10–7.85	Own H8	L4IHV	367	578	G	T4	67 3/4	9x3x 1/4	T
36	.....HA	*°3420	132	156	17000	z6800	7.50/20D	9.00/20	Wau BZ	6–4x4 1/4	320	5.9	222	95–2800	7–2 3/8x10 1/4	Y	Fu 5B33	5	Own H	SF	H	7.30–8.06	Own H	L4IHV	391	660	G	T4	79 3/4	9x3x 1/4	
37	.....HR	*°3980	144	154	20000	z7800	7.50/20D	10.00/20	Wau MKR	6–4 1/4 x4 1/4	381	5.75	270	98–2500	7–2 3/8x12 1/2	Y	Fu 5A43	5	Own U	SF	H	6.72–8.84	Own U	L4IHV	496	867	G	T4	90	7 1/8x3x 1/2	TT
38	.....CU	*°4920	150	182	22000	z9500	10.00/20S	Opt	Wau MZR	6–4 1/4 x4 1/4	404	5.6	288	106–2500	7–2 3/8x12 1/2	Y	Fu 5A430	5	Own U	BF	H	6.72–8.84	Own U	L4IHV	496	867	G	T4	90	7 1/8x3x 1/2	CC
39	.....CUA	*°4640	150	182	22000	z9350	10.00/20S	Opt	Wau MZR	6–4 1/4 x4 1/4	404	5.6	288	106–2500	7–2 3/8x12 1/2	Y	Fu 5A430	5	Own U	BF	H	6.72–8.84	Own U	L4IHV	496	867	G	T4	90	7 1/8x3x 1/2	CC
40	.....8U	*°5640	150	182	25000	z10150	12.00/20S	Opt	Wau SRLR	6–4 1/8 x5 1/8	462	5.5	330	112–2400	7–3x10 7/8	Y	Fu 5A62	5	Own U	BF	H	6.72–8.84	Own U	L4IHV	496	867	G	T4	90	8 1/2x1/4	CC
41	.....8UA	*°5440	150	182	25000	z10050	12.00/20S	Opt	Wau SRLR	6–4 1/8 x5 1/8	462	5.5	330	112–2400	7–3x10 7/8	Y	Own U	5	Own U	BF	H	6.72–8.84	Own U	L4IHV	496	867	G	T4	90	8 1/2x1/4	C
42	.....YU	*°6300	150	182	26000	z10300	11.00/20D	Opt	Wau SRKR	6–4 1/8 x5 1/8	517	5.5	369	126–2300	7–3x10 7/8	Y	Own U	5	Own U	BF	H	6.72–8.84	Own U	L4IHV	496	867	G	T4	90	8 1/2x1/4	C
43	.....MJ6	*°7040	150	180	30000	z13250	11.00/20D	Opt	Wau SRKR	6–4 1/8 x5 1/8	517	5.5	369	126–2300	7–3x10 7/8	Y	Own M	10	Wis 1337	2F	H	6.65–8.67	Wis 1337	L4IHV	578	976	G	T4	90	10 1/8x3x 1/2	C
44	.....M6	*°7850	150	180	32000	z13200	11.00/20D	Opt	Wau 140GK	6–4 1/2 x5 1/2	525	5.8	410	138–2300	7–3 1/4x13 1/2	Y	Own M	10	Wis 1757	2F	H	6.42–8.47	Wis 1757	L4IHV	578	976	G	T4	90	10 1/8x3x 1/2	CC
45	.....M7	*°8800	150	180	38000	z14000	13.00/20S	Opt	Wau 145GK	6–5 1/4 x6	779	5.6	580	162–2000	7–3 1/2x17 3/4	Y	Own M	10	Wis 1757	2F	H	6.42–8.47	Wis 1757	L4IHV	578	976	G	T4	90	10 1/8x3x 1/2	CC
46	.....M10	*°10400	150	180	42000	z14250	14.00/20S	Opt	Her HXE	6–5 3/4 x6	935	5.5	610	198–2000	7–3 1/2x16 1/2	Y	Own M	10	Wis 1910	2F	H	7.16–9.23	Wis 1910	Ws4IA	639	976	G	T4	90	10 1/8x3x 1/2	CT
47	.....(T) T26	*°2990	132	156	(x)	z6600	7.00/20D	8.25/20	Wau BK	6–3 3/4 x4 1/4	282	5.7	189	84–2800	7–2 1/4x10 1/4	Y	Fu 5B330	5	Own H8	SF	H	6.48–8.78	Own H8	L4IHV	367	578	G	T4	67 3/4	9x3x 1/4	
48	.....(T) T30	*°3450	132	156	(x)	z6800	7.50/20D	9.00/20	Wau BZ	6–4x4 1/4	320	5.9	222	95–2800	7–2 3/8x10 1/4	Y	Fu 5B330	5	Own H	SF	H	6.66–9.04	Own H	L4IHV	391	660	G	T4	67 3/4	9x3x 1/4	T
49	.....(T) T32	*°4010	132	154	(x)	z7800	7.50/20D	10.00/20	Wau MKR	6–4 1/4 x4 1/4	381	5.7	270	98–2500	7–2 3/8x12 1/2	Y	Fu 5A430	5	Own H	SF	H	6.66–9.04	Own H	L4IHV	391	660	G	T4	67 3/4	9x3x 1/4	
50	Kenworth.....539	6730	134	146	24000	10180	9.00/20D	10.00/24	Wau MZR	6–4 1/4 x4 1/4	404	5.9	300	112–2600	7–3x11 1/4	Y	Fu 5A62	5	Wis 72300	2F	H	5.77–8.40	Wis F207	L4IHV	458	785	a	PD	72	7 1/8x3 1/4x 1/2	CC
51	540	7976	134	146	27700	10310	10.00/20D	10.00/24	Wau MZR	6–4 1/4 x4 1/4	404	5.9	300	112–2600	7–3x11 1/4	Y	Fu 5A62	5	Wis 1337	2F	H	6.85–9.41	Wis F323	Ws4IA	648	975	a	PD	72	7 1/8x3 1/4x 1/2	CC
52	541	8619	134	146	27700	10650	10.00/20D	10.00/24	Bud LO525	6–4 1/2 x5 1/2	525	5.5	385	135–2200	7–3x11 1/2	Y	Fu 5A62	5	Wis 1337	2F	H	6.85–9.41	Wis F323	Ws4IA	648	975	a	PD	72	7 1/8x3 1/4x 1/2	C
53	542	9253	134	146	35000	10935	10.50/20D	11.00/24	Bud LO525	6–4 1/2 x5 1/2	525	5.5	385	135–2200	7–3x11 1/2	Y	Fu 5A62	5	Wis 1757	2F	H	6.02–8.50	Wis F427	Ws4IA	648	975	a	PD	72	7 1/8x3 1/4x 1/2	C
♦ 54	Marmon-(C) LD6-4	**	114	114	4500	2719	7.50/15S	7.50/15S	Ford V8†	8–3 1/8 x3 1/4	221	6.1	150	90–3800	3–2.5x4.71	N	Ford	4	Ford	S¼	U	**–4.55	Own LD5	FO4IH	162	264	ac	2I	40 1/8	5 1/4x2 1/4x.15	TDx
55	Herr..(C) OT5-4	**	122	122	6800	3972	7.00/18S	7.50/18S	Ford V8†	8–3 1/8 x3 1/4	221	6.1	150	90–3800	3–2.5x4.71	N	Ford	4	Ford	SF	H	*–4.86	Own OT4	FO4IH	201	308	ac	2I	48 1/8	9x2 1/4x.19	T
♦ 56	.....(C) MM5-4	**	134	134	13500	4361	6.00/20D	7.50/20	Ford V8†	8–3 1/8 x3 1/4	239	6.1	176	100–3600	3–2.5x4.71	N	Ford	4	Ford	SF	H	**–6.67	Own IX4-11	FO4IH	303	506	ac	TX	60 1/8	7x2 1/4x.21	T
♦ 57	.....(C) MM6-4	**	158	158	13500	4441	6.00/20D	7.50/20	Ford V8†	8–3 1/8 x3 1/4	239	6.1	176	100–3600	3–2.5x4.71	N	Ford	4	Ford	SF	H	**–6.67	Own IX4-11	FO4IH	303	506	ac	TX	93	7x2 1/4x.21	T
♦ 58	(C) (c.o.e.) MM5-4	**	134	134	13500	4531	6.00/20D	7.50/20	Ford V8	8–3 1/8 x3 1/4	239	6.1	176	100–3600	3–2.5x4.71	N	Ford	4	Ford	SF	H	**–6.67	Own IX4-12	FO4IH	303	506	ac	TX	117	7x2 1/4x.21	T
♦ 59	(C) (c.o.e.) MM6-4	**	158	158	13500	4611	6.00/20D	7.50/20	Ford V8	8–3 1/8 x3 1/4	239	6.1	176	100–3600	3–2.5x4.71	N	Ford	4	Ford	SF	H	**–6.67	Own IX4-12	FO4IH	303	506	ac	TX	117	7x2 1/4x.21	C
60	..... DSD100-4	**	143	Op	13200	5040	6.50/20D	7.50/20	Her JXB	6–3 3/4 x4 1/4	263	5.4	182	78–2800	7–2 1/2x10 1/4	N	WG T9WG	4	Tim MH1011	SF	H	*–6.8	TWH 101	L4IH	267	452	a	TX	60	7 1/4x2 1/2x 1/4	CC
61	..... DSD200-4	**	143	Op	13200	5500	7.00/20D	7.50/20	Her JXC	6–3 3/4 x4 1/4	282	5.3	196	84–2800	7–2 1/2x10 1/4	N	Ful 5A33	5	Tim MH1011	SF	H	*–6.8	TWH 101	L4IH	267	452	a	TX	60	7 1/4x2 1/2x 1/4	
62	..... DSD300-4	**	143	Op	15900	5764	7.50/20D	8.25/20	Her JXD	6–4x4 1/4	320	5.3	224	95–2800	7–2 1/4x10 1/4	N	Ful 5A33	5	Tim MH1022	SF	H	*–6.8	TWH 102	L4IH	281	527	a	TX	60	7 1/4x2 1/4x 1/4	CC
63	..... DSD400-4	**	158	Op	19500	7782	8.25/20D	9.00/20	Her WXC3	6–4 1/4 x4 1/2	383	5.0	260	106–2800	7–2 3/4 x13 1/4	Y	Ful 5A430	5	Tim MH1033	SF	H	*–6.83	TWH–103	L4IH	342	578	a	FD	72	9 1/4x3x 1/4	C
64	..... DSD500-4	**	158	Op	23400	8680	9.00/20D	9.75/20	Her WXLC3	6–4 1/4 x4 3/4	404	5.0	293	118–2800	7–2 3/4 x13 1/4	Y	Ful 5A430	5	Tim MH1044	SF	H	*–7.8	TWH 104	L4IH	384	785	a	FD	72	9 1/4x3x 1/4	C

♦ Denotes new models or change in specifications. * Includes price of cab. ** Prices not available at this time. (x) Tire capacity governs gross load. z All chassis weights include cab. ° Prices subject to change without notice.
▲ This model has a Clark Automatic booster or auxiliary engine with bore of 3¼, stroke 4 in., rating 47 hp. at 3200, 94 ft. lb. torque at 1600 r.p.m. This, in combination with Chevrolet 235-cu. in. engine develops 286 ft. lb. torque and 140 hp.
● 10.50/24 single front. ¶ 11.25/24 single front.

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Line Number	MAKE AND MODEL	Wheels Driven	Chassis List Price	WHEEL-BASE Minimum Standard	WHEEL-BASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	TIRE SIZES: Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Sp'ds	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES SERVICE: Make	Location	Type Operat'n	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimension (Min. Std. W. B.)	FRAME: Side Rail Dimensions	Type
	International(11)																																
♦ 1	K-6-F.....4R		2445	151	194	22000	6640	7.00/20D	8.25/20	O-BLD250	6-3 1/16 x4 1/2	251	6.3	200	100-3200	4-2.7x5 11/16	N	Own H41C	4	Own RF1450	SF	HT	5.28-6.66	Own F470	LH6IHV	495	869	c	PDx	77	8 1/16 x3 1/16 x 1/16	Tf
♦ 2	(c) K-8-F....4R		3525	161	215	27000	8360	7.50/20D	9.00/20	O-FBC318	6-3 1/16 x4 1/2	318	5.4	241	100-2800	7-2.7x11 11/16	Y	Own F51	5	Own RF1560	SF	HT	5.62-7.16	Own F550	LH6IHV	643	1105	c	PDx	84	9 1/4 x3 1/16 x3 1/16	Tf
♦ 3	(c) K-11-F...4R		5420	161	215	37000	10815	9.00/20D	10.00/20	O-FBC401	6-4 1/16 x5	401	5.2	308	114-2600	7-2.7x11 11/16	Y	Fu 5A430	5	Own RF1670	SF	HT	4.55-7.16	Own F760	LH6IHV	872	1383	c	PDx	84	10 1/16 x3 1/16 x3 1/16	Tf
♦ 4	(c) KR-12-F..4R		.....	173	245	45000	12850	10.00/20D	11.00/20	O-FBC450	6-4 1/16 x5	451	5.2	331	120-2400	7-2.7x11 11/16	Y	Fu 5A62	5	Own RF1750	2SF	HT	7.10-9.03	Own F850	Ws61A	966	1628	G	PD	84	11 1/16 x3 1/16 x3 1/16	T
♦ 5	(c) AR-626-F 4R		11400	180	253	68000	18015	10.00/24D	12.00/24	O-FEB648	6-5x5 1/16	648	4.4	460	140-2100	7-3 1/4 x17 3/4	Y	Own H7	5	Own 1585	2SF	HT	7.98-9.44	Own F930	Ws61A	1020	1680	G	PD	92	14x3 1/16 x3 1/4	TL
♦ 6	(a) K-6-T...2F		1995	176	194	22000	6275	7.00/20D	8.25/20	O-BLD250	6-3 1/16 x4 1/2	251	6.3	200	100-3200	4-2.7x5 11/16	N	Own H41C	4	Own RT1460	SF	HT	5.62-7.16	Own F470	LH6IHV	495	869	c	PX	102	8 1/16 x3 1/16 x 1/16	Tf
♦ 7	(a,b,c) K-8-T .2F		3115	161	215	27000	8105	7.50/20D	9.00/20	O-FBC318	6-3 1/16 x4 1/2	318	5.4	241	100-2800	7-2.7x11 11/16	Y	Own F51	5	Own RT1570	SF	HT	5.62x7.16	Own F550	LH6IHV	678	1161	c	PX	84	9 1/4 x3 1/16 x3 1/16	Tf
♦ 8	(a,c) KR-11-T2F		4785	161	215	37000	10340	9.00/20D	10.00/20	O-FBC401	6-4 1/16 x5	401	5.2	308	114-2600	7-2.7x11 11/16	Y	Fu 5A430	5	Own RT1680	2SF	HT	5.02-9.03	Own F760	LH6IHV	872	1383	c	PX	84	10 1/16 x3 1/16 x3 1/16	Tf
9	Ken-..(D) 510 2F		9467	221	247	39000	12630	9.00/22D	10.00/22	Cum HB6	6-4 1/16 x6	672	17.	500	150-1800	7-4 1/16 x16 1/16	Y	BL 7641	4	Tim T18000	CF	R	6.04-10.5	Tim 36000	Ws4rIA	692	1030	a	TD	134	9 1/16 x3 1/16 x 1/16	C
10	worth. (D) 522 2F		8665	214	239	46000	12150	9.00/20D	11.00/22	Cum HB6	6-4 1/16 x6	672	17.	500	150-1800	7-4 1/16 x16 1/16	Y	BL 7641	4	Tim 76800	2F	H	6.02-9.2	Tim 36000	Ws4rIA	782	1158	a	TD	127	9 1/16 x3 1/16 x 1/16	CC
11	....(D) 523 4R		9686	214	239	42000	13700	9.00/20D	11.00/24	Cum HB6	6-4 1/16 x6	672	17.	500	150-1800	7-4 1/16 x16 1/16	Y	BL 7641	4	Tim SW3000	WF	R	5.40-10.2	Tim 36000	Ws4rIA	800	1194	a	TD	127	9 1/16 x3 1/16 x 1/16	CC
12	....(D) 524 4R		10491	214	239	54000	14700	10.00/20D	11.00/24	Cum HB6	6-4 1/16 x6	672	17.	500	150-1800	7-4 1/16 x16 1/16	Y	BL 7641	4	Tim SW452	WF	R	6.0-11.7	Tim 36000	Ws4rIA	980	1450	a	TD	127	9 1/16 x3 1/16 x 1/16	CC
13	.....528 4R		8018	211	236	43000	12400	10.00/20D	11.00/24	Bud LO525	6-4 1/16 x5 1/16	525	5.5	385	135-2200	7-3x11 1/16	Y	Fu 5A-620	5	Tim SW3000	WF	R	5.40-10.2	Tim 35100	Ws4rIA	800	1194	a	TD	127	9 1/16 x3 1/16 x 1/16	CC
14	**Marmon-Herr.**																																
15	..... DSD200-6	**		167	Op	19500	8065	7.00/20D	7.00/20	Her JXC	6-3 1/16 x4 1/16	282	5.3	196	84-2800	7-2 1/16 x10 11/16	N	Ful 5A33	5	Wis MH1100	2F	R	*-7.36	WH 110	L6IH	549	930	a	TX	84	7 11/16 x2 1/16 x3 1/16	P
16	..... DSD300-6	**		167	Op	25500	9025	7.50/20D	8.25/20	Her JXD	6-4x4 1/16	320	5.3	224	95-2800	7-2 1/16 x10 11/16	N	Ful 5A33	5	Wis MH1111	2F	R	*-7.66	WH 111	L6IH	600	1055	a	TX	84	7 11/16 x2 1/16 x3 1/16	P
17	..... DSD400-6	**		158	Op	26500	9600	8.25/20D	9.00/20	Her WXC3	6-4 1/16 x4 1/16	383	5.0	260	106-2800	7-2 5/16 x13 1/16	Y	Ful 5A430	5	Wis MH1111	2F	R	*-9.33	WH 111	L6IH	600	1055	a	FD	72	9 11/16 x3x3 1/16	P
18	..... DSD500-6	**		158	Op	32500	10400	8.25/22D	9.00/20	Her WXLC3	6-4 1/16 x4 1/16	404	5.0	293	118-2800	7-2 5/16 x13 3/16	Y	Ful 5A430	5	TW MH1133	2F	R	*-9.33	WH 113	Ws61A	726	1300	a	FD	72	9 11/16 x3x3 1/16	P
19	..... DSD600-6	**		173	Op	32500	12200	9.00/20D	9.00/20	Her RXB	6-4 1/16 x5 1/16	501	5.4	330	110-2200	7-3x13 1/16	Y	Ful 5A620	5	TW MH1133	2F	R	*-8.43	WH 113	Ws61A	726	1300	a	FD	84	9 11/16 x3x3 1/16	P
20	..... DSD800-6	**		173	Op	42000	14475	9.75/20D	9.75/22	Her RXC	6-4 1/16 x5 1/16	529	4.9	390	131-2200	7-3x13 1/16	Y	Ful 5A620	5	TW MH1144	2F	R	*-8.14	WH 114	Ws61A	1056	1626	a	FD	84	10 1/16 x3x 1/16	P
21	..... DSD900-6	**		192	Op	42000	17590	9.75/20D	9.75/22	Her HXD	6-5 1/16 x6	855	4.5	555	180-2200	7-3 1/16 x16 1/16	Y	Ful 4A86	4	TW MH1144	2F	R	*-9.11	WH 114	Ws6IA	1056	1626	a	FD	96	10 1/16 x3x3 1/16	P
22	..... DSD1000-6	**		198	Op	52000	19200	10.50/20D	10.50/24	Her HXE	6-5 3/16 x6	935	4.5	610	198-2200	7-3 1/16 x16 5/16	Y	Ful 4A86	4	TW MH1155	2F	R	*-9.11	WH 115	Ws6IA	1056	1626	a	FD	102	10 1/16 x3x3 1/16	P
23	(D) DD8D200-6	**		167	Op	19500	8465	7.00/20D	7.00/20	Her DJXB	6-3 1/16 x4 1/16	260	14.	178	79-2600	7-3x10 1/16	N	Ful 5A33	5	W MH1100	2F	R	*-6.66	WH 110	L6IH	549	930	a	TX	84	7 1/16 x2 1/16 x3 1/16	P
24	(D) DD8D300-6	**		167	Op	25500	9425	7.50/20D	8.25/20	Her DJXC	6-3 1/16 x4 1/16	298	14.	208	83-2600	7-3x10 1/16	N	Ful 5A33	5	W MH1111	2F	R	*-6.41	WH 111	L6IH	600	1055	a	TX	84	7 11/16 x2 1/16 x3 1/16	P
25	(D) DD8D600-6	**		173	Op	32500	12800	9.00/20D	9.00/20	Her DRXB	6-4 1/16 x5 1/16	474	14.	360	121-2200	7-3x13 1/16	Y	Ful 5A620	5	TW MH1133	2F	R	*-7.66	WH 113	Ws6IA	726	1300	a	FD	84	9 11/16 x3x3 1/16	P
26	(D) DD8D800-6	**		173	Op	42000	15060	9.75/20D	9.75/22	Her DRXB	6-4 1/16 x5 1/16	474	14.	350	124-2200	7-3x13 1/16	Y	Ful 5A620	5	TW MH1144	2F	R	*-8.14	WH 114	Ws6IA	1056	1626	a	FD	84	10 1/16 x3x 1/16	P
27	(D) DD8D900-6	**		192	Op	42000	18325	9.75/20D	9.75/22	Her DHXB	6-5x6	707	14.	530	176-1800	7-3 1/16 x17	Y	Ful 4A86	4	TW MH1144	2F	R	*-8.14	WH 114	Ws6IA	1056	1626	a	FD	96	10 1/16 x3x3 1/16	P
28	(D) DD8D1000-6	**		198	Op	52000	19950	10.50/20D	10.50/24	Her DHXB	6-5x6	707	14.	530	176-1800	7-3 1/16 x17	Y	Ful 4A86	4	TW MH1155	2F	R	*-8.14	WH 115	Ws6IA	1056	1626	a	FD	102	10 1/16 x3x3 1/16	P
29	....(C) MM5-6	**		156	156	22000	5875	6.00/20D	7.50/20	Ford V8†	8-3 1/16 x3 3/16	239	6.1	176	100-3600	3-2.5x4.71	N	Ford	4	Tim Ford	SF	R	**-6.67	Own IX4-11	FO6IH	503	836	ac	TX	82 1/2	7 1/16 x3x .21	TL
30	....(C) MM6-6	**		180	180	22000	5997	6.00/20D	7.50/20	Ford V8†	8-3 1/16 x3 3/16	239	6.1	176	100-3600	3-2.5x4.71	N	Ford	4	Tim Ford	SF	R	**-6.67	Own IX4-11	FO6IH	503	836	ac	TX	106 1/2	7 1/16 x3x .21	TL
31	(C) (c.o.e.) MM5-6	**		156	156	22000	6045	6.00/20D	7.50/20	Ford V8	8-3 1/16 x3 3/16	239	6.1	176	100-3600	3-2.5x4.71	N	Ford	4	Tim Ford	SF	R	**-6.67	Own IX4-12	FO6IH	503	836	ac	TX	115	7 1/16 x3x .21	TL
32	(C) (c.o.e.) MM6-6	**		180	180	22000	6167	6.00/20D	7.50/20	Ford V8	8-3 1/16 x3 3/16	239	6.1	176	100-3600	3-2.5x4.71	N	Ford	4	Tim Ford	SF	R	**-6.67	Own IX4-12	FO6IH	503	836	ac	TX	139	7 1/16 x3x .21	TL
	Sterling																																
33	(16)HBT128 2F	**		181	227	32000	10625	9.00/20D	9.75/20	Wau 6MZR	6-4 1/16 x4 1/16	404	5.3	286	99-2400	7-2 1/16 x12 1/16	Y	Fu 5A430	5	TimSBT252H	SF	L	5.57-7.80	Tim 35000N	L4rIHV	504	968	a	TX	102	9x3 1/16 x1/16	A
34	(15-16)HWS128 4R			181	227	32000	10775	9.00/20D	9.75/20	Wau 6MZR	6-4 1/16 x4 1/16	404	5.3	286	99-2400	7-2 1/16 x12 1/16	Y	Fu 5A430	5	Tim SW251H	WF	L	6.20-10.40	Tim 35000N	L4rIHV	504	968	a	TX	102	9x3 1/16 x1/16	A
35	(15-16)JWS160 4R			201	241	40000	12775	9.75/20D	10.50/20	Wau6SRKR	6-4 1/16 x5 1/16	517	5.5	368	125-2300	7-3x13 1/16	Y	Fu 5A62	5	Tim SW352W	WF	L	6.00-10.67	Tim 26452N	Ws4rIA	800	1348	a	TX	122	9x3 1/16 x1/16	A
36	(15-16)HWS235S4R			201	241	50000	13575	10.50/20D	10.50/24	Wau6SRKR	6-4 1/16 x5 1/16	517	5.5	368	125-2300	7-3x13 1/16	Y	Fu 5A62	5	Tim SW452W	WF	L	6.00-10.25	Tim 27452N	Ws4rIA	800	1316	a	TX	122	9 1/16 x3 1/16 x3 1/16	A
37	(16)HCS235 4R			211	251	52000	15250	9.75/22D	10.50/24	Wau6SRKR	6-4 1/16 x5 1/16	517	5.5	369	125-2300	7-3x13 1/16	Y	Fu 5A62	15	Own SR255W	CD	R	10.73-13.25	Tim 27452N	Ws4rIA	868	1368	a	JX	123	9 1/16 x3 1/16 x3 1/16	A
38	(16)HCS265 4R			211	251	60000	16400	10.50/20D	11.25/24	Wau 6RBR	6-5x5 1/16	677	5.3	492	152-2200	4-3 1/16 x11	Y	Fu 4B86	12	Own SR265W	CD	R	10.76-13.56	Tim 27452N	Ws4rIA	868	1368	a	JX	123	9 1/16 x3 1/16 x3 1/16	A
39	(16)HCS297 4R			211	251	70000	18300	10.50/24†S	11.25/24‡S	Wau 6RBR	6-5x5 1/16	677	5.3	492	152-2200	4-3 1/16 x11	Y	Fu 4B86	12	Own SR330W	CD	R	10.76-15.37	Tim 27452N	Ws4rIA	988	1552	a	JX	123	9 1/16 x3 1/16 x3 1/16	Y
40	(16)HCS330 4R			180	180	80000	20100	10.50/24††S	11.25/24‡‡S	Wau 6RBR	6-5x5 1/16	677	5.3	492	152-2200	4-3 1/16 x11	Y	Fu 4B86	12	Own SR330W	CD	R	10.76-15.37	Tim 27451N	Ws4rIA	988	1552	a	JX	99	12x3 1/16 x1/16	Y
	Truckstell																																
41	(C)TRC-2X400 2F		2385	157	218	26000	6100	8.25/20xD	8.25/20	Chev	6-3 1/16 x3 11/16	235	6.6	192	93-3000	4-2 1/16 x5 1/16	N	Chev	8	Eat 1475	SFd	H	4.5-9.02	Chev	B6IHV	511	729	a	2I	83	7 1/16 x3x 11/16	C
42	(C)TRC-2X400CO 2F		2494	154	204	27000	6250	8.25/20xD	8.25/20	Chev	6-3 1/16 x3 11/16	235	6.6	192	93-3000	4-2 1/16 x5 1/16	N	Chev	8	Eat 1475	SFd	H	6.5-9.02	Chev	B6IHV	511	729	a	2I	83	7 1/16 x3x 11/16	C
43	(C)TRC-4XD26C 4R		2665	141	212	26000	6580	7.50/20xD	8.25/20	Chev	6-3 1/16 x3 11/16	235	6.6	192	93-3000	4-2 1/16 x5 1/16	N	Chev-0	8	Chev	SFd	H	**-6.4	Chev	C6IHV	511	729	a	2I	66	7 1/16 x3x 11/16	C
44	(C)TRC-4XD27CO 4R		2775	116	186	27000	6690	7.50/20xD	8.25/20	Chev	6-3 1/16 x3 11/16	235	6.6	192	93-3000	4-2 1/16 x5 1/16	N	Chev-0	8	Chev	SFd	H	**-6.4	Chev	C6IHV	511	729	a	2I	71	7 1/16 x3x 11/16	C
45	(C)TRC-4XD30E 4R		3379	117	212	30000	7850	8.25/20xD	8.25/20	Chev	6-3 1/16 x3 11/16	235	6.6	192	93-3000	4-2 1/16 x5 1/16	N	Chev-0	16	Eat 1475	SFd	H	7.67	Chev	F6IHV	511	729	a	2I	66	7 1/16 x3x 11/16	C
46	(C)TRF-2X250 2F		2018	155	252	22000	5900	7.50/20xD	8.25/20	Ford	8-3 1/16 x3 3/16	239	...	176	95-3600	3-2.5x4.7	N	Ford	8	Eat 1350	SFd	H	5.83-8.57	Ford	F6IHV	501	836	a	TX	81 1/2	7 1/16 x3x 11/16	C
47	(C)TRF-2X400 2F		2396	156	253	26000	6000	8.25/20xD	8.25/20	Ford	8-3 1/16 x3 3/16	239	...	176	95-3600	3-2.5x4.7	N	Ford	8	Eat 1460	SFd	H	6.5-9.02	Ford	F6IHV	501	836	a	TX	83	7 1/16 x3x 11/16	C
48	(C)TRF-2X250CO 2F		2148	122	241	23000	5950	7.50/20xD	8.25/20	Ford	8-3 1/16 x3 3/16	239	...	176	95-3600	3-2.5x4.7	N	Ford	8	Eat 1350	SFd	H	5.83-8.57	Ford	F6IHV	501	836	a	TX	81 1/2	7 1/16 x3x 11/16	C
49	(C)TRF-2X400CO 2F		2526	123	242	27000	6050	8.25/20xD	8.25/20	Ford	8-3 1/16 x3 3/16	239	...	176	95-3600	3-2.5x4.7	N	Ford	8	Eat 1460	SFd	H	6.5-9.02	Ford	F6IHV	501	836	a	TX	83	7 1/16 x3x 11/16	C
50	(C)TRF-4XD26F4R		2708	143	210	26000	6600	7.50/20xD	8.25/20	Ford	8-3 1/16 x3 3/16	239	...	176	95-3600	3-2.5x4.7	N	Ford-0	8	Ford	SFd	H	6.88-7.87	Ford	F6IHV	501	836	a	TX	67 3/4	7 1/16 x3x 11/16	C
51	(C)TRF-4XD29EO 4R		2916	143	210	29000	6880	8.25/20xD	8.25/20	Ford	8-3 1/16 x3 3/16	239	...	176	95-3600	3-2.5x4.7	Y	Ford-0	..	Eat 1350	SFd	H	6.88-9.56	Ford	F6IHV	501	836	a	TX	67 3/4	7 1/16 x3x 11/16	C
52	(C)TRF-4XD27F 4R		2838	117	180	27000	6720	7.50/20xD	8.25/20	Ford	8-3 1/16 x3 3/16	239	...	176	95-3600	3-2.5x4.7	N	Ford-0	8	Ford	SFd	H	6.88-7.87	Ford	F6IHV	501	836	a	TX	77 1/4	7 1/16 x3x 11/16	C
53	(C)TRF-4XD30EO 4R		3152	117	180	30000	7880	8.25/20xD	8.25/20	Ford	8-3 1/16 x3 3/16	239	...	176	95-3600	3-2.5x4.7	Y	Ford-0	..	Eat 1350	SFd	H	6.88-9.56	Ford	F6IHV	501	836	a	TX	77 1/4	7 1/16 x3x 11/16	C
54	(C)TRC-4XD31EO		3508	117	184	31000	7950	7.50/20D	8.25/20	Chev	6-3 1/16 x3 11/16	235	6.6	192	93-3000	4-2 1/16 x5 1/16	N	Chev-0	16	Eat 1475	SFd	H	7.67	Chev	F6IHV	511	729	a	2I	66	7 1/16 x3x 11/16	C
55	(C)TRF-4XD30E		3317	143	210	30000	7850	7.50/20D	8.25/20	Ford	8-3 1/16 x3 3/16	239	...	176	95-3600	3-2.5x4.7	Y	Ford-0	16	Eat 1460	SFd	H	7.67	Ford	F6IHV	501	836	a	TX	77 1/4	7 1/16 x3x 11/16	C
56	(C)TRF-4XD31EO		3450	117	180	31000	7950	7.50/20D	8.25/20	Ford	8-3 1/16 x3 3/16	239	...	176	95-3600	3-2.5x4.7	Y	Ford-0	16	Eat 1460	SFd	H	7.67	Ford	F6IHV	501	836	a	TX	77 1/4	7 1/16 x3x 11/16	C

** Prices quoted on application. * Prices subject to change without notice. **Prices not available at this time. † 6 cylinder engine may be installed. ♦ Denotes new models or change in specifications.
† Rear 11.25/24. †† Rear 12.00/24. ‡ Rear 12.75/24. ‡‡ Rear 13.50/24. x Front 7.00/20.

[This Commercial Car Journal Truck Specifications Table is published every other month, six times a year, in the February, April, June, August, October and December issues.]

Every hour of lay-up time saved brings Victory a little closer . . .

A Message to Mack Owners on Truck Maintenance

It's going to be increasingly difficult to replace trucks during the critical days that lie ahead.

You who own Mack trucks have the advantage of the extra durability that's built into them. (That Macks *do* last longer is proved by figures which show that 7 out of every 10 Macks bought ten years ago are still in profitable use. *R. L. Polk survey, as published in Automotive News.*) But you can't hope to get the most out of your Macks unless you have them serviced promptly—regularly—at the nearest Mack factory branch or Mack dealer.

Consult your local Mack service manager for helpful, constructive advice on how best to conserve your truck equipment. Ask him about the Mack "Preventive Maintenance Plan," a practical system of periodic inspection and adjustment, which will save you money on repair bills—keep your trucks on the road for extra thousands of miles.

Remember, a truck is something more than a private investment in time of war. As a part of our vital transportation system, it is a public responsibility. Let us help you "keep 'em rolling."

MACK TRUCKS, INC., LONG ISLAND CITY, N. Y.

THE MOST COMPLETE LINE OF TRUCKS IN THE WORLD—
1 TO 45 TONS AND ALL HEAVY DUTY!

Mack

LUBRICANT AND COOLING CAPACITIES OF MOTOR TRUCKS

INCLUDING LUBRICANT CAPACITIES OF ENGINE • TRANSMISSION • REAR AXLE

a—2-speed rear, 8 qt.
b—Double reduction rear, 6½ qt.
c—Double reduction rear, 9 qt.
d—Front axles same as rear.
e—10 summer, 14 winter.
f—2-speed rear, 13 to 15.
g—2-speed rear, 18.
h—Auxiliary transmission and power divider require 8½ qt. additional.
i—Each axle.
j—10 summer, 15 winter.
k—18 pt. summer, 24 pt. winter.
m—8 pt. summer, 12 pt. winter.
n—Capacity of jackshaft unit.
p—Auxiliary transmission requires 6 pt. additional.
q—Auxiliary transmission requires 10 pt. additional.
x—Auxiliary transmission requires 5 pt. additional.
y—Auxiliary transmission requires 12 pt. additional.

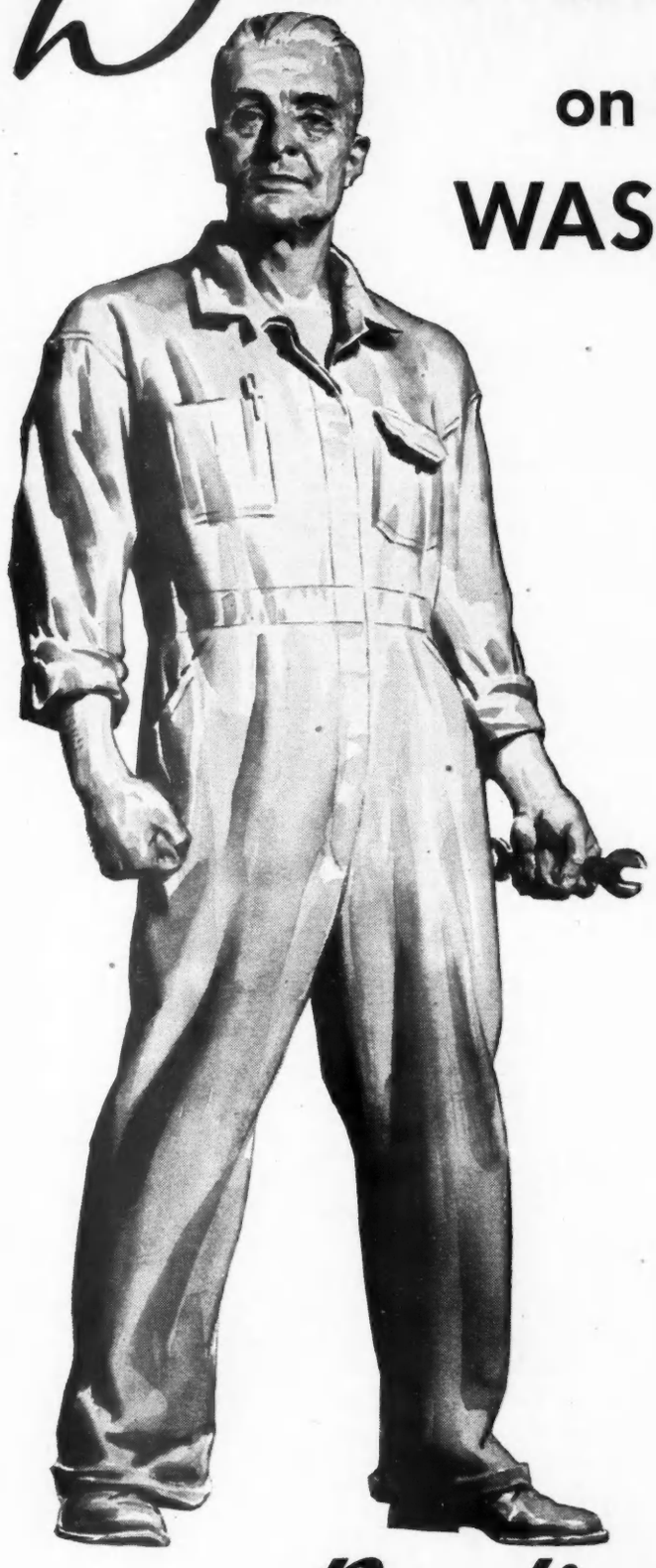
TRUCK MAKE AND MODEL	LUBRICANT CAPACITY			Cooling System Capacity, Quarts
	Engine Quarts	Transmission Pints	Rear Axle Pints	
AUTOCAR				
A, UA	6	8	8	22
B, UB	6	12	14	22
RL, RLD, RM, RMT, 1TR, 6X2RL, RLS, URLS	10	14	12	23
D, DP	10	14	12	39
UD, 1UTR	10	14	12	37
UDP, 6X2UD	10	14	12	37
S	12	30	18	39
N, DH, 3TR	12	14	18	39
6X2NF	12	18	18	39
DF, 2TR, 6X2DF	12	14	12	39
T, NF, 5TR, 6X2T, UNF, UT, 4UTR, 5UTR, 6X2UNF, 6X2UT	12	18	18	41
UN, 2UTR, 3UTR, 6X2UN, US	12	14	18	41
UDF	12	14	12	41
C	12	30	18	41
4X4DF, 4X4N	12	19		39
4X4NF	12	23		39
4X4S	12	23		41
6X4DF	12	14		39
6X4TO, 6X4UTO, 6X4UTD	12	18		41
6X4TD	12	30		41
6X4TC	12	30	28	41
RB, URB	10	12	12	23
C10, C10T, U10, U10T	6	8	8	22
C20, C20T, U20, U20T	6	12	12	22
C30, C30T, U30, U30T	10	12	12	23
C40, U40	10	14	12	23
C40T, C40D, C4062, U40T, U40D, U4062	10	14	14	23
C4064	10	14	12 i	23
C50T, U50T	10	14	14	23
C50D	10	16	20	23
C60	12	14	14	39
U60	12	14	14	37
C60T, C70, C70T, C70D, C7062	12	14	20	39
U60T, U70T, U80, U80T, U80D, U8062	12	14	18	41
U60D	12	14	18	37
U70, U7062	12	14	20	41
C7044	12	14x		41
C7064	12	14	12 i	39
U7064	12	14	12 i	41
C80, C80T, C8062	12	14	18	39
C80D	12	14y	18	39
C8044	12	14 x		41
C8064, U8064	12	14	18 i	41
C90, C90T, U90, U90T	12	14	18	41
C90D	12	14 y		41
U90D	12	24		41
C9044	20	24 x		48
C9062, U9062	12	14 y	18	41
C9064	12	14 y		41
U9064	12	14		41
DC100T	16	24 y	18	46
DC100D	16	26 y		46
DC10044	16	24 x		46
DC10062	16	26 y	18	46
DC10064	16	24		46
DU100T, DU10062	20	26	18	41
DU10064	20	26		41
BANTAM				
60	3	2½	2½	4
65	3	2½	2½	5½
BROCKWAY				
78 (1926-42)	5	6	6	15½
83 (1936-42)	5	6	6	19½
88 (1936-42)	5	6	8	19½
BROCKWAY—Cont.				
92 (1936-42)	5	6	8	19½
94 (1936-42)	5	5½	12	19½
96, 110, 125X (1936-40)	8	5½	8	28
112 (1938-42)	7	5½	8	22
128 (1938-42)	7	5½	12	22
130, 145 (1936-40)	8	5½	12	28
150X4 (1936-40)	8	8½	12	28
150X5 (1936-40)	8	16	12	28
160X, 160XSBT, 165X (1936-40)	8	16	12	30
170X (1936-40)	10	24	11	29
180XSBT Spec. (1936)	10	24	13	30
175X, 195X (1936-42)	10	24	12	29
220X (1936-42)	10	24	17	29
240X (1936-42)	10	24	12	31
260X (1936-42)	10	23	17	31
146 (1941-42)	7	12	12	22
147 (1941-42)	7	12	18	22
152, 153 (1941-42)	8	16	12	28
154 (1941-42)	8	16	18	28
156 (1941-42)	8	16	18	28½
162 (1941-42)	8	16	12	29
166 (1941-42)	8	16	12	29½
CHEVROLET				
½ Ton (1934-35)	5	2½	4½	10½
1½ Ton (1934-35)	5	6½	8½	10½
½ Ton (1936)	5	2½	4½	15
½ Ton (1936)	5	6½	7	15
½, ¾, 1 Ton (1937-38)	5	1½	4½	14
1½ Ton (1937-38)	5	7	9	14
½, ¾ Ton (1939-42)	5	1½	4½	14
1½ Ton (1939)	5	5½	9	14
1½ Ton (1940-42)	5	5½	11	14
C.O.F. (1939)	5	5½	9	16½
C.O.E. (1940-42)	5	5½	11	16½
CORBITT				
12B (1937)	6	8	12	26
22B (1937)	8	24	14	30
14BT (1937)	8	8	8	26
18BT (1937)	8	24	14	30
22BT (1937)	10	30	15	38
27DT (1937)	10	30	16	38
12B (1938-41)	5	8	12	26
13B (1938-41)	5	8	8	27
17B, 17BT (1938-41)	7	12	14	28
21B (1938-41)	8	16	15	30
26D (1938-41)	8	16	16	30
14BT (1938-41)	7	12	8	29
18BT (1938-41)	8	16	14	31
22BT (1938-41)	10	24	15	38
27DT, F27, 27BT (1938-41)	10	24	16	38
F12 (1938-41)	5	8	12	27
F14 (1938-41)	7	8	8	28
F18 (1938-41)	8	8	9	30
F19 (1938-41)	7	12	9	28
F23 (1938-41)	10	16	11	38
F35	10	24	17	38
DIAMOND T				
412DR (1935-37)	8	10	12	24½
512B (1935-37)	8	10	8	24½
512DR (1935-37)	8	10	15	24½
212A, 212B (1936-37)	6	4½	6	23½
221 (1936-37)	6	4½	6	24
228 (1936-37)	6	4½	8	23½
244, 313 (1936-37)	6	4½	8	24
320 (1936-37)	6	6	8	26½
353, 360 (1936-37)	6	10	8	26½
80 (1936-37)	6	2	5	18
DIAMOND T—Cont.				
80, 301, 304 (1938)	6	4	4	21
401COE (1938)	6	4	6	23½
402COE (1938)	6	4	8	23½
404, 405 (1938)	6	4	6	22½
406 (1938)	6	4	6	23
507 (1939)	6	6	8	23½
509 (1939)	6	6	6	23
607COE (1939)	6	6	8	26
609COE (1939)	6	10	8	26
611 (1939)	6	7	8	25
612 (1939)	6	10	8	25
613, 614 (1939)	6	10	8	24
412DR, 512DR (1939)	8	18	12	26
512B (1939)	8	18	10	26
201, 305, 306 (1939)	6	4	4	16
201C, 305C (1939)	6	4	5	18
306C (1939)	6	4	6	18
404, 406 (1939)	6	4½	6	23
404C, 509 (1939)	6	4½	6	23
509C, 612C (1939)	6	4½	8	23
612 (1939)	6	4½	8	22
614 (1939)	6	12	8	22
614C (1939)	6	12	8	24
803C (1939)	8	20	10	28
804C (1939)	8	20	12	28
201 (1940)	6	3½	6	16
201C (1940)	6	4½	8	18
306, 306C (1940)	6	4½	8	16½
306SC (1940)	6	4½	8	19
404 (1940)	6	4½	8	18
404C (1940)	6	4½	8	23½
404SC (1940)	6	4½	8	28
406, 509 (1940)	6	4½	9	23½
509C, 612C (1940)	6	4½	9	24
612 (1940)	6	4½	9	23
614, 614C (1940)	6	12	9	31½
803C (1940)	8	20	12	28
804C (1940)	8	20	16	28
805H, 805W (1940)	8	20	20	28
805B, 805BW (1940)	8	20	12	28
805DR, 805DRW (1940)	8	20	12	28
900W (1940)	13	24	14	43½
201 (1941-42)	6	3½	6	16
201C, 306C (1941-42)	6	4½	8	18
306 (1941-42)	6	4½	8	17
306SC (1941-42)	6	4½	8	19
404, 404C (1941-42)	6	5	8	23
404SC (1941-42)	6	5	8	26
406, 509, 612SC (1941-42)	6	5	9	23
406SC, 509SC (1941-42)	6	5	9	26
509C, 612C (1941-42)	6	5	9	24
612 (1941-42)	6	5	9	22
614 (1941-42)	6	12	9	22
614C (1941-42)	6	12	9	23
612SC (1941-42)	6	5	9	25
614SC (1941-42)	6	12	9	25
805C (1941-42)	8	20	12	28
806, 806C (1941-42)	8	20	16	28
805 (1941-42)	8	20	20	28
702 (1941-42)	8	20	12	44
900 (1941-42)	14	24	14	44
DODGE				
KC, KCL, KH Series, LC	5	2½	3½	15
K32, K33, K34	5	6	5	12
K35, K36, K37, K38, K45, K46, K47, K48	6	5	8	14
K50, K51, K52, K70, K71, K72	8	10	8	23½
LE Series	5	6	4½	16½
LF Series	5	6	8	16

CONTINUED ON PAGE 74

Declaration of War

on two axis allies—

WASTE and WEAR!



As we see it, every vital transport vehicle forced out of service by premature, preventable wear, is a loss in America's fight for Victory. Every service part that must be scrapped because of neglect is a gain for our enemies.

In the service field, we must all declare our own war on these two unrelenting enemies—Waste and Wear!

We must pass along what specialized help we have available, to the service men who are going to keep those vehicles running.

In building carburetors, brakes, power braking equipment and other units for the majority of the millions of trucks, tractors, buses and cars now in use, Bendix has necessarily studied field service requirements long and thoroughly. Much of the data resulting from these years of study has been "boiled down" into a simplified "Carburetor Overhaul Procedure Manual" and another Book—"ABC of Vacuum Power Brakes."

Both of these useful service aids are available to fleet and shop service directors who request them on their firm's stationery.

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SOUTH BEND, INDIANA

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new
FIGHTING MANUALS
for Automotive Service Men

Bendix Products

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LUBRICANT & COOLING SYSTEM CAPACITIES

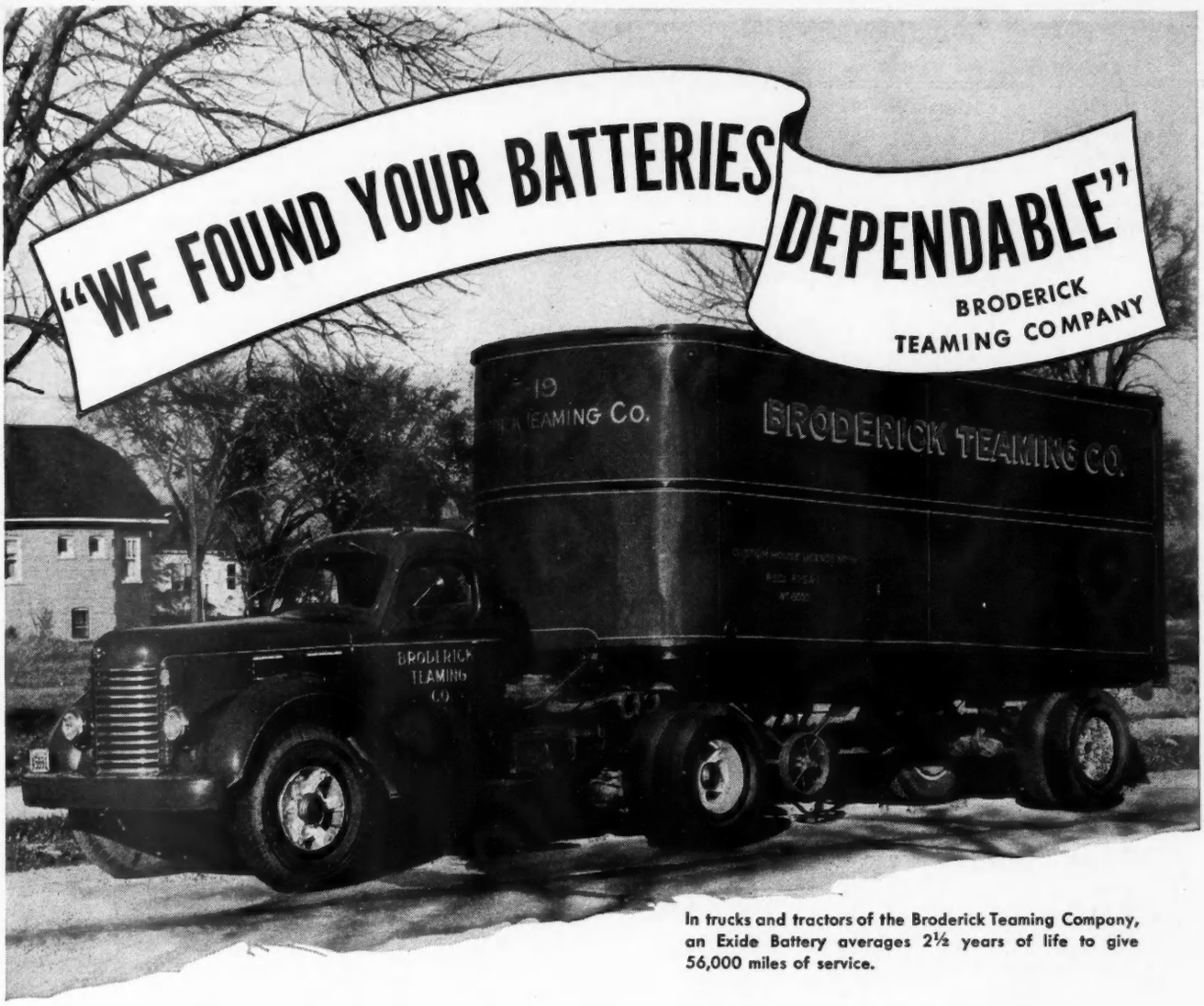
CONTINUED FROM PAGE 72

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY			Cooling System Capacity, Quarts
	Engine Quarts	Transmission Pints	Rear Axle Pints	
DODGE—Cont.				
LG, LH Series	8	11	14	18
K50V, K51V, K52V, K60V, K61V, K62V	8	11	14	20¾
MC, RC Series (1937-38)	5	3½	3½	16
MD, RD Series (1937-38)	5	3½	4	16
ME, RE Series (1937-38)	5	6	6½	18
MF, RF Series (1937-38)	5	6	8	18
MG, MH, RG, RH Series (1937-38)	5	11	8	19
ML, MK, RL, RK, RU Series (1937-38)	8	11	14	
TC (3-Speed Trans.)	5	3½	3½	15½
TC (4-Speed Trans.)	5	6	3½	15½
TD-15 (3-Speed Trans.)	5	3½	3½	17
TD-15 (4-Speed Trans.)	5	6	3½	17
TD-20, TD-21 (3-Speed Trans.)	5	3½	4	17
TD-20, TD-21 (4-Speed Trans.)	5	6	4	17
TE (4-Speed Trans.)	5	6	6½	19½
TF (4-Speed Trans.)	5	6	11 a	19½
TF (5-Speed Trans.)	5	11	11 a	19½
TG, TH	5	11	10ab	20½
TL, TK, RO, RP	8	11	7ac	28
TLD, TKD	14	11	7ac	
VC, WC	5	3½	3¼	15½
VD-15, WD15	5	3½	3¼	17
VD-20, VD-21, WD20, WD21	5	3½	4½	20½
VF, VM, WF, WFM	5	6	11	19½
VG, VH, WG, WH, WGM, WHM	5	11	10ab	20½
VL, VK	8	11	14ac	28
VLD, VKD, WLD, WKD	14	11	14ac	35
FEDERAL				
9 (1937-38)	5	4	4	18
10 (1937-38)	4	4	4	18
11, 11K, M11, 12K, M12, 14K	4½	4	4	15
11H, 14, M14	4½	4	4	15
15, 15H, 15K, 16K, 17K, 18, 18H, 18K, 20, 20H, 20K	4	4	8	25
75, 75H, 75K, 76K, 77K, 80, 80H, 80K	4	4	8	25
29, 29K, 89, 89K	4	13	12	25
29H, 89H	4	13	15	25
25, 25H, 25K, 85, 85H, 85K	4	8	12	25
C7, C8	10	24	22	29
40, 50, 40F	8	9	15	30
62	12½	22	32	34
63	10	22	32	32
7M7	5	5	3	12
8M8	4½	5	3	14
35, 90	7	12	12	28
45, 55, 92, 94	7	10	15	28
FORD				
AA, BB, 4Cyl. (1929-34)	5	2½	9	13½
BBV8 (1932-34)	5	2½	9	22
51V8 (1935-36)	5	2½	9	25
75V8 (1937)	4	5	9	16
79V8 (1937)	5	5	9	25
81T, 817T (1938)	5	5	9	24
81Y (1938)	5	2½	5	22
82Y (1938)	4	2½	5	16
81C (1938)	5	2½	2½	22
82C (1938)	4	2½	2½	16
91T, 917T, 911W, 91W, 917W, 99T, 997T, 991W, 99W, 997W (1939)	5	5	7	24
91Y, 91C (1939)	5	3	3	22
92Y, 922C (1939)	4	3	3	16
018T, 01T, 01W, 011W, 098T, 09T, 09W, 091W, 118T, 11T, 11W, 111W, 119T, 19T, 19W, 191W	5	5	7	24
01D, 01Y, 01C (1940)	5	2½	3	22
02D, 02Y, 022C (1940)	4	2½	3	16
11D, 11Y, 11C (1941-42)	5	2½	3	24
1ND, 1NY, 1NC	4	2½	3	14
FWD				
HS, HA	8	12	6	26
HG, HR	10	16	6	26
HM	10	16	8	30
CUA	10	24	8	30
CU	10	16	8	30
SU, SUA, YU	12	24	8	36½
M6	12	24	12	
MJ6	12	22	12	42
MJ6X6	12	22	16	42
M6X6	20	22	16	52
M7	20	22	16	65
M10	20	22	16	64
T26	10	12	12d	24
T32	12	16	12d	28
T40	12	24	8d	36
T60	20	26	8d	36
T65	20	26	16d	40
T72	20	22	16d	52
GENERAL MOTORS				
T14 (1937)	6	1½	5	15½
T16 (1937)	6	7	7½	15½

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY			Cooling System Capacity, Quarts
	Engine Quarts	Transmission Pints	Rear Axle Pints	
GENERAL MOTORS—Cont.				
F16 (1937)	6	7	6½	15½
T16H, F16H (1937)	6	7	6½	15½
T18, T18H (1937)	7	4	6½	16
F18, F18H (1937)	8	4	6½	16
T23, F23 (1937)	8	7	10	20
T23H, F23 (1937)	8	7	13	20
T33 (1937)	7	7	13	20
F33 (1937)	6	7	13	20
T33H (1937)	7	7	9	20
F33H (1937)	6	7	9	20
T46 (1937)	12	Several axles and transmissions optional—Considerable variation in lubricant capacity.		28
F46 (1937)	10			28
T46, 400 (1937)	12			34
F46, 400 (1937)	10			34
T61 (1937)	12			34
F61 (1937)	10			34
T61H (1937)	12			34
F61H (1937)	10			34
T14, T145, T15 (1938)	6	1¾	5	15½
T155 (1938)	6	1¾	7½	16
T16, F16 (1938)	6	6½	7½	17
T16H, F16H (1938)	6	6½	10	17
T18, T18H (1938)	7	4	10	16
F18, F18H (1938)	6	4	10	17
T23 (1938)	7	7	10	17
T23H (1938)	7	7	13	17
F23 (1938)	8	7	10	17
F23H (1938)	6	7	13	17
T33 (1938)	7	13	13	17
T33H (1938)	7	13	9	17
F33 (1938)	6	13	13	17
F33H (1938)	6	13	9	17
T46 (1938)	12	13	9	28
F46 (1938)	10	13	9	28
T61, T61H, F61, F61H (1938)	10	(e)	16	34
AC100, AC150, CC100, CC150	8	1¾	4½	16
AC-250, AF-240, AF-241, CC300	8	1¾	5½	16
CC250	8	1¾	3	16
CC260	8	1¾	3	16
AC-300, AF-300, AF-310, CC-300	8	6½	6 f	17
AC-350, AF-350, CC-350, CF-350	8	6½	7f	17
AC-400	9	4	7f	18
AF-400, CC-400, CF-400	9	7	7f	18
AC-450, AF-450, CC-450, CF-450	9	7	8½g	18
AC-500, AF-500	9	13	12g	18
AC-550, AC-600, AF-550, AF-600	9	13	13g	18
AC-650, AF-650	9	13	15g	18
AC-700, AF-700	10½	11½	15g	22
AC-800, AF-800, AC-850, AF-850	10½	9	16	22
GRAMM				
11 (1940-41)	6	6	4	18
15 (1937-39)	6	6	6	18
21 (1940-41)	6	6	6	18
25, 30, 31 (1937-40-41)	6	6	8	19
40, 41, 46 (1937-40-41)	6	6	8	19
45, 50 (1937-39)	6	6	8	19
55 (1937-39)	6	8	8	20
56 (1940-41)	6	6	10	20
70 (1937-39)	6	6	14	20
71 (1940-41)	6	12	10	20
75 (1937-39)	6	6	14	22
76, 86 (1940-41)	6	12	13	22
85 (1937-39)	8	6	16	22
98 (1940-41)	7	20	16	24
DJX40 (1937-39)	6	6	9	23
DJX70 (1937-39)	6	6	14	23
DJX75 (1937-39)	6	6	14	25
DJX85 (1937-39)	6	6	16	25
DJX55 (1937-39)	6	8	8	23
D46 (1940-41)	6	6	9	23
D56 (1940-41)	6	6	10	23
D71 (1940-41)	6	12	10	23
D76 (1940-41)	10	12	13	25
D86 (1940-41)	10	20	13	25
D96 (1940-41)	10	20	16	25
HUG				
42 (1936-39)	10	16	9	28
43 (1936-39)	10	24	11	28
D42 (1936-39)	10	24	9	31
D43 (1936-39)	10	15	11	31
D43L (1936-39)	14	15	12	38
70K (1936-39)	10	16	12	28
87Q, D87Q (1936-39)	10	24	16	28
99, 99S, D99, D99S (1936-39)	14	24	52	38½
15W (1940-42)	8	8	8	23
19W, 83W (1940-42)	8	12	8	23
23W (1940-42)	8	12	8	24
42W, 85W (1940-42)	8	16	8	28
43W (1940-42)	16	15	12	38
87W (1940-42)	8	16	11	28
92U (1940-42)	10	24	16	28
98 (1940-42)	18	36	16½	38
D98 (1940-42)	14	36	16½	38
99 (1940-41)	18	36	33	38

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY			Cooling System Capacity, Quarts
	Engine Quarts	Transmission Pints	Rear Axle Pints	
HUG—Cont.				
D99 (1940-41)	14	36	33	38
99S (1940-41)	18	36	52	38
D99S (1940-41)	14	36	52	38
INTERNATIONAL				
C1, C15, C30, CS30, C30S	6½	5½	9½	15
A1, A2, B2, M2, M3, C10, C20, CS20	4	5½	9½	17
B3	7	5½	9½	20
C5	4	3	4	14
C35, C35B, CS35, CS35B, C35T, CS35T, B4, C40, CS40, C40T, C40F	7	9	15	20
A4, A5, A6, C50, C50T	10	11½	12	28½
C55, C55F, C55T, C60, C60T	9	11½	12	29½
A7, A7F	20	48	24	42
A8	20	48	24	42
D2, D15	6½	3	4	15½
D5	4	3	4	14¼
D30, D30B, D303, D186T	6½	5½	7	18
DS30, DS30B, DS186T	6½	5½	17	18
D35, D216T	7¼	5½	10	18¾
D35B	7¼	14	10	18¾
DS35	7¼	5½	17	18¾
DS216T	7¼	5½	16	18¾
D40	7¼	14	10	21¾
DS40	7¼	14	16	21¾
D50, DR50, D246, DTR246T	10	14	16	24¾
DS50, DS246T	10	19	17	24¾
D60, DR60	10	19	16	28
DR70, DR346T	10	19	16	31
D300	6½	5½	7	19¼
DS300	6½	5½	17	19¼
D500, DR500	10	14	16	25½
DS500	10	19	17	25½
DR700	10	19	16	32
D246F	10	14 h	15 i	24¾
D346F	10	19 h	16 i	31
DR426F	10	48 h	16 i	31
AR826F	22	48 h	12 i	60
M3	4	5½h	9½	17
K1, K2	5½	3	4	15
K3	5½	3	5	15
K4	5½	5½	7	15¼
KS4	5½	5½	8	15¼
K5	5½	5½	7	15½
KS5	5½	5½	13	15½
K6	7¼	5½	10	20¾
KS6	7¼	5½	13	20¾
K7	7¼	11	10	20¾
KS7	7¼	11	16	20¾
K8, KS8	10	11 s	18	25½
K10	10	18	12	25½
KR10	10	18	17	25½
KR11	10	18	18	25¾
K5COE	5½	5½	7	22¾
KS5COE	5½	5½	13	22¾
K6T	7¼	5½	10	20¾
KS6T	7¼	5½	13	20¾
K6F	7¼	5½	7 i	20¾
K7COE	7¼	11	10	22½
KS7COE	7¼	11	16	22½
K8T, KS8T	10	11	18	25½
KR8T	10	11	20	25½
K8F	10	11	10 i	25½
K8COE, KS8COE	10	11	18	25½
KR8COE	10	11	20	25½
KS10	10	18	20	25½
KS11, KS11T	10	18	20	25¾
KR11T	10	18	17	25¾
K11F	10	18	16 i	25¾
KR11COE	10	18	17	30½
KS11COE	10	18	20	30½
KR12F	10	26	18 i	27
KR8	10	11	20	25½
KENWORTH				
505	18	11	12	32
506, 507, 508	18	11	16	32
509	18	11	10ea	32
510, 511, 519, 520, 549, 550	20	18	10	54
512	20	18	10ea	54
513	6	12	9ea	24
514	18	8	9ea	32
515	18	8	10ea	32
516	18	18	12ea	32
521, 522, 548	20	18	26	54
523	20	18	12ea	54
524	20	18	20ea	54
525	9	24	16	36
526	9	24	20	36
527	9	24	10ea	36
528	9	24	12ea	36
536	6	12	8	24
537, 538	6	12	12	24
539	9	24	8	32
540, 541	9	24	12	32
542	9	24	17	32
543, 544, 553	8	16	12	32
545, 554, 555	8	16	16	32
546, 556	8	16	12ea	32
547	16	18	13	54

CONTINUED ON PAGE 76



In trucks and tractors of the Broderick Teaming Company, an Exide Battery averages 2½ years of life to give 56,000 miles of service.

BEHIND this straightforward statement, "We found your batteries . . . dependable," lies a long story.

For approximately 10 years, Exide commercial-type batteries have been used in the trucks of the Broderick Teaming Company . . . a fleet now totaling 60 trucks, tractors and trailer units running 930,000 miles a year. Those are tough miles, too, they call for "start and stop" driving all over Chicago and vicinity. They call for a tough battery, and it's no surprise to learn that Mr. W. J. Broderick insists on Exide Batteries for new equipment and all replacements. Ten years of service justify his faith in Exide.

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The World's Largest Manufacturers of Storage Batteries for Every Purpose
Exide Batteries of Canada, Limited, Toronto

LUBRICANT & COOLING SYSTEM CAPACITIES

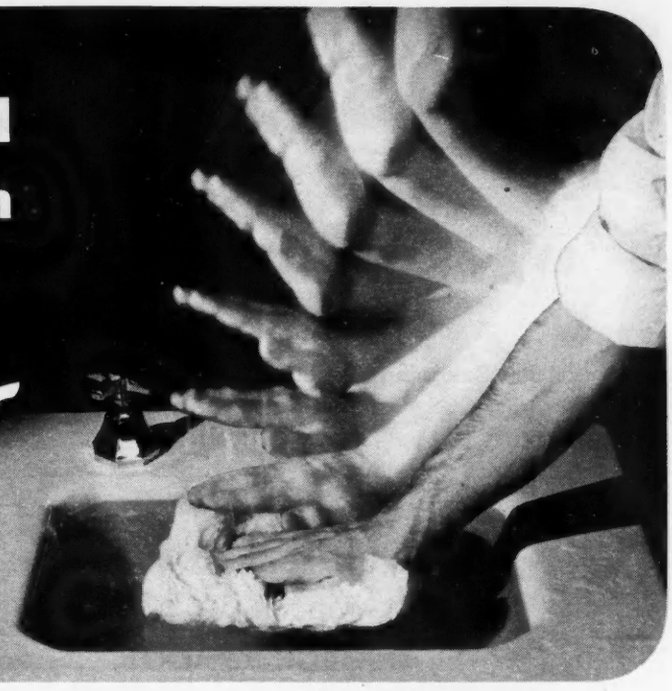
CONTINUED FROM PAGE 74

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY			Cooling System Capacity, Quarts
	Engine Quarts	Transmission Pints	Rear Axle Pints	
KENWORTH—Cont.				
551	6	12	13	24
552	20	18	20	54
LA FRANCE REPUBLIC				
C3	8	6	8	22
D4	8	7	8	22
E4	8	8	9	22
F4, H6	8	16	12	32
K1	10	12	16	36
M4	10	12	26	36
EH5B, EH5D	8	12	9	40
EH6B, EH6D	8	12	12	40
FH5B, FH5D	8	16	12	....
HH7	8	16	12	....
KH2	10	24	12	....
MH5	10	24	16	....
MARMON-HERRINGTON				
A10-4, A20-4	6	8	16	22
A30-4, A40-4, A50-4	7	24	18	28
TH300-4, TH310-4	10	26	32	36
TH310A-4, TH310A-6	10	26	36	40
TH315-4, TH315-6	20	32	36	50
TH320-4, TH320-6	20	16	48	50
B10-4, C10-4, B20-4, C20-4, C20-6, B30-4, C30-4, C30-6	7	12	10	24
B40-4, B40-6, C40-4, C40-6, B50-4	10	16	10	36
B60-4, C55-4, C55, DR4, C60-4, C60-6	12	24	12	36
B70-4, B70-6, C70-4	12	24	19	40
B80-4, B80-6, C80-4, C80-6	12	24	20	40
TH415-4, TH415-6, TH515-4, TH515-6, TH420-4, TH420-6, TH520-4, TH520-6	24	32	36	50
B5-4x4, B6-4x4, B5-6x4	5	5	14	25
B5-6x6, B6-6x6	5	5	7	25
B6-6x4	6	5	7	25
LD1, LD14	5	5	2½	25
C5A4, C5B4, CSA-4, CSB-4, C5-4, C6-4	5	5	7	25
C5-6, C6-6 (1937)	5	5	7	25
E5-4, E6-4, E5-COE-4 (1938)	5	5	7	25
E5-6, E6-6 (1938)	5	5	7	25
LD3-4, OOT2-4, OT2-4, LD4-4, LLD4-4, OT3-4, OOT3-4	5	5	2½	22
F5-4, FF5-4, F5-COE, FF5-COE-4, F6-4, FF6-4, H5-4, HH5-4, H6-4, HH6-4	5	5	7	24
F5-6, FF5-6, F6-6, FF6-6, H5-6, HH5-6, H6-6, HH6-6	5	5	7	24
J5-4, J6-4, JJ5-4, JJ6-4, JJ5-6, JJ6-6, LD5-4, LLD5-4, OT4-4, OOT4-4	5	5	7	24
DSD-100-4, DSD-200-4	6	10	10	24
DSD-200-6, DSD-300-4, DSD-300-6	6	12	10	24
DSD-400-4, DSD-400-6	7	16	15	36
DSD-500-4, DSD-500-6	7	17	10	32
DSD-550-4, DSD-550-DR4	10	24	10	38
DSD-600-4, DSD-600-6, DSD-700-4, DSD-700-6	10	24	19	38
DSD-800-4, DSD-800-6	10	24	20	38
DSD-900-4, DSD-900-6, DSD-1000-4, DSD-1000-6	14	22	24	69
OSHKOSH				
WLD	7	23½	10½	28
WLX	7	23½	10½	28
JCB	6	11	8½	22
JD	6	11	8½	22
FC-35	10	30½	12	40
FS, FB, FC, FB-35	10	30½	12	40
B3S	7	23½	10	28
B3D	7	23½	11	28
C3S	10	30½	10	40
C3D	10	30½	12	40
R3S	10	30½	19	40
FD	10	30½	25	40
W100	6	10 p	12	25
W200	6	10 p	15	25
W300, W304, W307	6	18 p	12	36
W400	10	21 p	14	44
W500	10	21 p	15	44
W600	10	21 p	15	46
W700	10	21 p	15	46
W703, W705	13	21 p	15	46
W800	13	21 p	18	46
W900	16	19 q	18	40
BG3, GD, GDC	16	19 n	21	62
W2300	6	18	15	36
REO				
4H5, 4J5, 4K5 (1936-37)	9	12	15	31
450 (1937)	4	2¼	2	12
475 (1937)	4	2¼	3½	12
650 (1937)	5	2½	2	14
675 (1937)	5	2½	3½	14
1A4, 1C4 (1937)	5	6	9	15½
1A4H, 1C4H, 1B4, 1D4 (1937)	6	6	9	19

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY			Cooling System Capacity, Quarts
	Engine Quarts	Transmission Pints	Rear Axle Pints	
REO—Cont.				
1B4H, 1D4H, 2B4, 2D4 (1937)	6	6	9	19½
2H5, 2J5 (1937)	6	12	9	19½
3H5, 3J5, 3K5, 3HR5, 3JR5, 3KR5 (1937)	6	12	15	25
450, 450L	4	2¼	2	12
475, 475L	4	2¼	3½	12
650, 650L	5	2¼	2	14
675, 675L	5	2¼	3½	14
1A4, 1C4	6	6	9	15½
1A4C, 1C4H, 1B4, 1D4	6	6	9	19
1B4H, 1D4H, 1BM7, 2BM7, 2B4, 2D4, 2L7M	6	6	9	19½
2J5, 2H5, 2L4H, 2L7MH	6	12	9	19½
1L5	6	6	9	15
3H5, 3J5, 3K5, 3HR5, 3JR5, 3KR5	6	12	15	25
4H5, 4J5, 4K5	9	(j)	15	....
3L6H	9	12	15	31
19, 20 (1941)	8	8	8	17
21 (1941)	8	8	12	17
22 (1941)	8	11	12	18
23 (1941)	8	12	15	19
4D19	5	8	8	17
6D19	6	8	8	17
D20	6	8	12	17
23-H (1942)	8	12	12	19
25 (1942)	8	20	16	18
27 (1942)	8	24	14	27
22 (1942)	8	11	12	19
21 (1942)	8	11	12	18
STERLING				
FB50 Del. (1937-38)	8	6	8	22
FB60 Del. (1937-38)	8	7	8	22
FB70 Del. (1937)	8	8	14	22
FC90 (1937-38)	8	9	16	22
FBT130	8	11	14	23
FB-80 (1937)	8	24	15	32
FD90 (1937)	8	24	11	32
FD97 (1937)	10	12	15	36
FC135 (1937)	10	12	18	36
HC140 (1937)	10	12	18	44
FD115 (1937)	10	12	18	36
FC100 (1937)	8	12	18	34
HC170	14	14	20	48
HCS210 (1937-38)	14	14	12	48
FB70 (1938)	8	8	11	22
FB80 (1938)	8	16	12	32
FD90 (1938)	8	16	11	32
FD97 (1938)	8	12	16	36
FC135 (1938)	8	12	18	36
HC140 (1938)	8	12	18	44
FD115 (1938)	8	12	26	36
FC100 (1938)	8	12	18	38
HC200, HC185 (1938)	14	14	20	48
HC250 (1938)	14	(k)	20	48
FBT152 (1938)	8	16	12	32
FWS152 (1938)	8	16	20	32
FDS180 (1938)	8	12	24	36
MB75, MD75 (1939-42)	8	12	11	34
MS75 (1939-41)	8	12	20	34
MB85, MD85 (1939-42)	8	12	12	34
JB90, JD90	8	16	12	27
MB90, MD90, HBT128 (1939-41)	8	16	12	34
HD105 (1939-42)	8	16	16	34
HD110 (1939-42)	10	m	16	36
HD115 (1939-42)	10	m	26	36
JD135 (1939-42)	10	24	26	32
JD137 (1939-42)	10	24	16	32
HD145	10	24	16	36
HD165 (1939-42)	10	24	20	36
HD175R (1939-42)	14	22	20	40
HC105 (1939-42)	8	16	14 n	34
HC115 (1939-42)	10	m	14 n	36
JC137	10	24	14 n	32
HC147, HC165 (1939-42)	10	24	14 n	36
JC145	10	24	16 n	32
HC145, HC156 (1939-42)	10	24	16 n	36
HC175 (1939-42)	10	24	20 n	36
HC185 (1939-42)	14	22	20 n	40
HC200 (1939-42)	14	22	22 n	40
HC250	14	22	22 n	42
HWS128, HDS128 (1939-42)	8	16	10	34
JWS160, JDS160 (1939-42)	10	24	12 i	32
HWS235S, HDS235S (1939-42)	10	24	20 i	36
HCS225	10	24	10 n	....
HCS255, HCS285, HCS300, (1939-42)	14	22	10 n	....
STEWART				
40A, 60A (1938)	4	6	3	15
45A, 45AL, 45AS (1938)	6	6	2	18
47A, 50A (1938)	8	6	5	24
50AS (1938)	8	6	10	24
49A (1938)	9	6	8	26
51A (1938)	9	6	8	24½
61A (1938)	4	6	6	18
58A (1938)	8	20	6	26
59A (1938)	8	20	10	26
38-6 (1938)	8	20	10	28

TRUCK MAKE AND MODEL	LUBRICANT CAPACITY			Cooling System Capacity, Quarts
	Engine Quarts	Transmission Pints	Rear Axle Pints	
STEWART—Cont.				
31X (1938)	8	26	16	31
49A (1940-42)	9	12	20	28
58A (1940-42)	8	16	22	26
59A (1940-42)	8	16	24	26
38A (1940-42)	8	18	16	28
STUDEBAKER				
J5 (1937)	6	2½	3	13
J15, J15M, J15B (1937)	6	6	8	16
J20, J20M, J20B (1937)	6	6	10	21
J25, J25M, J25B (1937)	6	12	14	21
J30, J30M (1937)	7	18	12	23
K5 (1938-40), L5 (1939)	5½	2½	3	14
K10 (1938-40)	5½	3	4	16
K15, K15B, K15M (1938-40)	5½	6	8	16
K20, K20M, K20MB (1938-40)	6	6	10	21
K25, K25M, K25MB (1938-40)	6	12	14	21
K30, K30M (1938-40)	7	18	12	23
Coupe-express (1942)	5	2½	3	10½
Standard (1942)	5	6	6	10½
Heavy-duty (1942)	6	6	6	13
WALTER				
FN	8	18	10	34
FM, FKM (1940-42)	10	18	10	34
FCK, FC (1940-42)	10	25	14	34
FB, FBR (1940-42)	14	25	14	52
WHITE				
60, 60K, 601, 602	13	8	10	25
61, 611, 612	13	8	16	26
500	6	7	8	22
510, 512	6	7	8	18
618	14	22	8	20
620	22	8	8	32
620K	22	8	8	30
621	22	8	8	32
621K, 51AS, 63, 630, 630K, 631, 631K	22	8	10	30
640, 641 (1AB Engine)	28	12	10	30
640, 640K, 641 (5A Engine)	22	40	10	30
641K, 642, 643 (5A Engine)	22	40	12	30
642, 643 (1AB Engine)	28	12	12	30
642SW310	28	12	17	30
642SW320	22	40	17	30
643SW410	28	12	22	30
643SW420	22	40	22	30
65K	22	8	10	34
691	22	40	12	31
700, 700H	12	7	8	23
700K	12	7	16	23
701, 702	6	4	12	17
703, 704	12	5½	11	23
704K	12	12	11	23
705	12	5½	10	23
707	6	4	14	17
708	12½	12	11	23
709 (11A Engine)	12	5½	11	23
709 (13A Engine), 710	12	12	11	25
712 (9A Engine)	9½	22	14	25
712 (16A Engine)	12	12	11	25
718 (16A Engine)	12	12	12	25
718 (30A Engine)	12½	12	20	23
720, 720T (14A Engine)	18	26	16	32
720, 720T (15A or 18A Engine)	18	26	22	32
722 (15A Engine)	18	26	16	32
722 (25A Engine)	18	26	22	32
750	12½	20	22	24
750T	12½	20	10	24
784, 786, 788, 798	14	20	11	27
800, 802	6	8	8	18
804	6	8	8	22
805	12	8	10	23
809, 810, 812	12	12	11	25
818 (16A Engine)	12	12	12	25
818 (30A Engine)	12½	12	20	25
820, 822	18	24	22	32
850	12½	20	22	25
904	12	5½	8 i	23
918	12	12	10 i	25
920	18	26	12 i	32
922	18	26	20 i	32
942	22	40	20 i	32
950	12½	20	10 i	23
991	22	40	20 i	31
White Horse (32A Engine)	3½	3	6	....
White Horse (35A Engine)	5	3	6	....
WA14, WA114	12	8½	18	27
WA18, WA118	12	5½	18	27
WA20, WA120, WA16	12	13	22	31
WA22, WA122	12	20	11	31
WA26, WA126, WA34, WA134	12	20	22	31
WA2064	12	13	8 i	31
WA2264	12	20	12 i	31
782	12	10	22	53
WILLYS				
38, 48, 4-40, 4-40P	4	1	3	11
441, 441P, 442, 442P	4	1	4	12

How can YOU tell whether or not an insulation is WATER REPELLENT



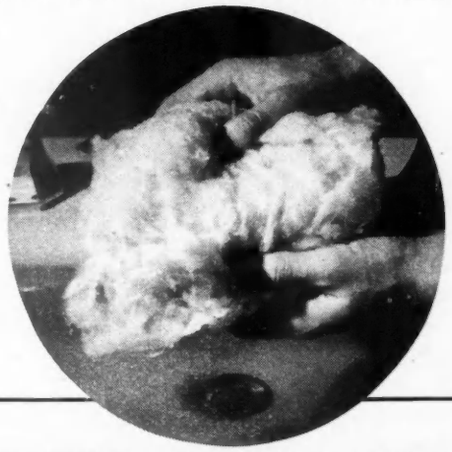
very easily ... MAKE THIS BAT TEST!

● Select square sections of several fibrous insulation materials, including Dry-Zero, to use as test samples. Strip them of any covering material. Fill your wash basin with water. Float one section of insulation, other than Dry-Zero, on the surface. Then with your palm outspread, bat the insulation under the water six or eight times. Bat it with sufficient force so that it is completely submerged. After six or eight times, the test sample will be almost completely saturated. Now pick it up and spread the fibres. You will find that the water has penetrated to the interior, making the whole section soggy, compact, and heavy, impairing its heat-stopping ability.

Apply the same test to the second and third test samples. Each one will respond in about the same manner.

Now take the test sample of Dry-Zero Insulation. Bat it under the water six or eight times, just exactly as you did the others. Each time Dry-Zero will rise to the surface buoyant as when you first placed it on the water! Now take it out of the water. The tiny water drops on the surface shed almost instantly. Open up the Dry-Zero sample by spreading with your thumbs as illustrated to the left, and you will be amazed to find no water has penetrated. Dry-Zero is still fluffy, bone-dry, and capable of rendering its original heat-stopping efficiency.

Dry-Zero Corporation, 222 North Bank Drive, Chicago; or 60 E. 42nd St., New York.



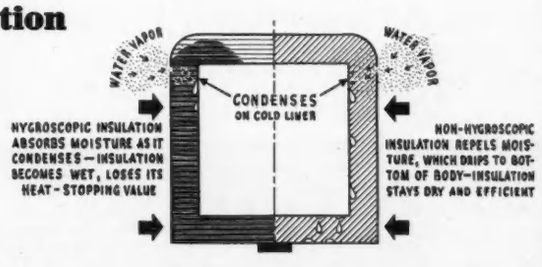
DRY·ZERO Insulation

IS THE ONLY ONE THAT WILL NOT BECOME SATURATED AND FINALLY SINK

why YOU need a Water-Repellent Insulation

The drawing to the right illustrates the difference between hygroscopic and non-hygroscopic (water-repellent) insulation. It's plain to be seen how moisture robs hygroscopic insulation of its heat-stopping efficiency and of the very life of the material. Properly installed, non-hygroscopic Dry-Zero Insulation retains its high thermal efficiency ("k" factor of 0.24) for the lifetime of any insulated unit.

In addition, Dry-Zero Insulation is uniquely free from settling, rotting, disintegration, and fungus growth.


WATER VAPOR
WATER VAPOR
CONDENSES ON COLD LINER
HYGROSCOPIC INSULATION ABSORBS MOISTURE AS IT CONDENSES — INSULATION BECOMES WET, LOSES ITS HEAT-STOPPING VALUE
NON-HYGROSCOPIC INSULATION REPELS MOISTURE, WHICH DRIPS TO BOTTOM OF BODY—INSULATION STAYS DRY AND EFFICIENT

WASHINGTON RUNAROUND

30,000 Rationing Applications . . . Slim Pickings for Operators . . . Rationing Pool Dwindles . . . Temporary Central Appeal Board . . . ODT Reaffirms Truck Need . . . Parts Production Encouraged . . . Gas Rationing Passes . . . Truck Rationing Side-Stepped . . . A Break on Tires Rumored . . . City Delivery Conservation . . . ODT Advisory Committee Set-Up . . . War Tires Coming Thru

by GEORGE T. HOOK, Editor

30,000 Rationing Applications

A ROUNDUP of Local Allocations Offices of the Office of Defense Transportation revealed that in the first two weeks that forms were available under the rationing plan applications had been filed for 30,000 commercial vehicles. In ODT lingo 30,000 applications were received. Of this total approximately 10,000 were Class I and Class 2 applications. And of the 30,000 applications only 350 were approved and honored with Certificates of Transfer which, in operator lingo, are pay-off slips. All 350 approvals were in Classes 1 and 2.

These statistics are not to be interpreted as meaning that all but 350 of the 30,000 applications were rejected. The number of rejections was not revealed. It is doubtful whether the Local Allocations Offices could have passed upon 30,000 applications in two weeks' time. It is reasonable to suppose that the offices are still feeling their way and that speed will come only with greater familiarity with applications and practice in appraising them.

Slim Pickings for Operators

However, the fact that 30,000 applications were filed in the first two weeks will give fleet operators some idea of their chances of getting one of the 100,000 trucks which will be rationed this year. The Allocations Section is working on the basis of a flexible monthly quota of 10,000 trucks. This statistic is just a guide to assist in spreading allocations over 10 months of this year. Applications approved may run over or under 10,000 in any one month and the Allocations Section need not call itself to account.

Rationing Pool Dwindles

It was estimated originally that 196,000 trucks were in the rationing pool. This estimate is being revised because the pool is being drawn on by Army, Navy and Lease-Lend authorities. The figure now being used is 160,000. Over a two-year period that makes a thin spread. It's just an appetizer alongside the meal of more than 500,000 new trucks annually to which truck operators have grown accustomed during the last seven years. It also indicates the problem that confronts operators, a problem about which more will be said next month.

Central Appeal Board

Pending the appointment of Local Appeal Boards, the Motor Transport Division of ODT is setting up a four-man Central Appeal Board. An operator whose application has been turned down and who appeals the rejection will be given the privilege of deciding whether he wants his appeal acted upon immediately by the Central Appeal Board or would prefer to delay action until his Local Appeal Board is organized. The Central Appeal Board is a temporary arrangement but it illustrates ODT's desire to give the industry service.

ODT Reaffirms Truck Need

The Office of Defense Transportation has not abandoned its conviction that production of trucks should be continued. The estimates previously submitted to the War Production Board, and discussed here last month, have been reaffirmed. ODT remains on record and WPB remains on the spot.

Parts Production Encouraged

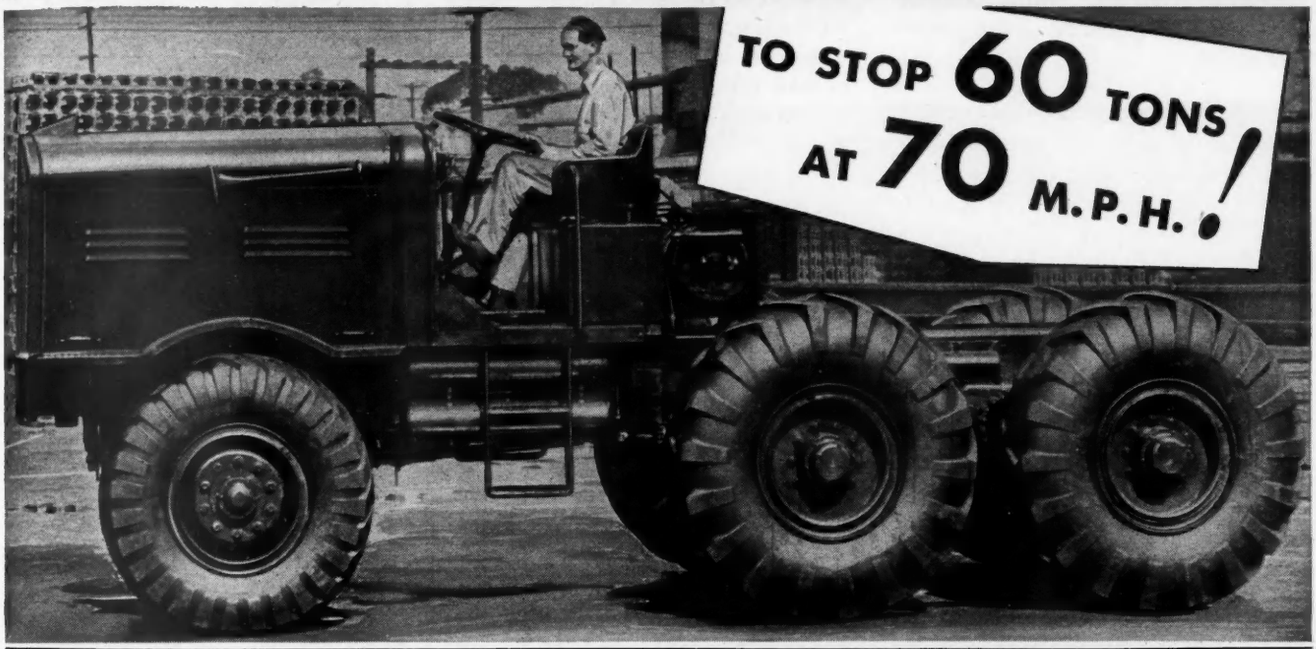
As predicted here last month, WPB has sanctioned an increase in the production of replacement parts for civilian trucks and trailers and has encouraged fulfillment of the generous quota by granting to manufacturers a better priority rating on materials—A-2 instead of A-3. The parts production order permits an output in 1942 amounting to 150 per cent of the parts sold for replacement purposes during 1941. WPB said it took this action "because it is necessary to the war program to keep existing trucks running."

Gas Rationing Passes Trucks

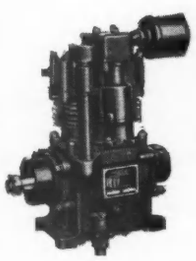
Tanker sinkings are blamed for the gasoline rationing order issued late in March to cover 17 eastern states. There was talk that rationing cards might follow the government's first step of cutting filling and bulk station supplies by 20 per cent. There was no indication that motor trucks would suffer by the gasoline curtailment. The government order said

(TURN TO PAGE 80, PLEASE)

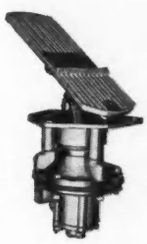
It Takes REAL POWER



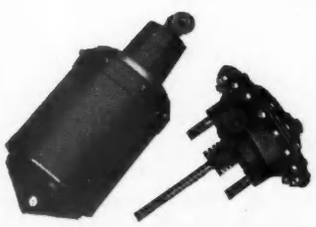
That is why SIX WHEELS, Inc. select ★ MIDLAND POWER BRAKES ★ for this mammoth new truck-tractor



Big 7.3 cu. ft. Compressor for DOUBLE AIR CAPACITY



Fully compensating foot control valve for PERFECT CONTROL



Cylinder or Diaphragms for SUPER POWER

● Whether you operate a sixty-ton truck or ½ ton light delivery, you can always depend on Midland Power Brake equipment! Thoroughly engineered, simple in design and rugged in construction, Midland Air and Vacuum brakes offer you longer, trouble-free operation at lower cost. That is why so many truck and trailer manufacturers choose MIDLAND as standard equipment . . . why more and more fleet operators every day are specifying Midland on their new equipment.

Complete kits available in both AIR and VACUUM for Ford, Dodge, Chevrolet, G.M.C. and International. Both types are backed by Midland's famous "Factory Rebuilt Exchange Plan." See your nearby Midland Distributor today, or write us direct for full information.

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MIDLAND POWER BRAKES (CHRISTENSEN)

WASHINGTON RUNAROUND

(CONTINUED FROM PAGE 78)

essential vehicles, which include motor trucks, would be on the preferential list.

Truck Rationing Side-Stepped

Truck rationing was in effect only a short time when the Allocations Section of ODT got wind of a practice that side-steps the rationing order. The section was notified that there is a tendency among some truck dealers to take title to trucks in their possession and leasing them out with a recapture clause which gives the party of the second part the option of taking possession after a specified period of time. ODT sees this practice as a subterfuge and is looking into the legal angle in an attempt to scotch it.

A Break on Tires Rumored

Late in March a rumor was current that certain operators would get a break from Henderson's OPA on tires. According to this report I.C.C. carriers would be permitted to establish a tire inventory that would be 10 per cent of the total number of wheels on the vehicles in operation. This 10 per cent inventory, it was understood, would be in addition to the one spare per vehicle now permitted. The purpose of this arrangement would be to eliminate interruptions of service arising from the delay occasioned by rationing procedure.

City Delivery Conservation

Bakers and milkmen were in Washington last month working out plans with WPB and ODT for conservation of delivery equipment. The plans are being carefully worked out so that when they are announced around the middle of April they will serve as models for bakers and milkmen all over the country and for other city delivery operations as well.

ODT Advisory Committee Set-up

Around that same time it is expected that the Motor Transport Division of ODT will be ready to announce the personnel of its 50-odd Regional Advisory Committees. These will be four-man committees, representing private carriers, common carriers, contract and local carriers and bus operators.

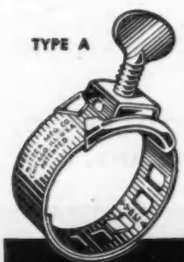
War Tires Coming Through

From a tire source with which we have not had enough experience to consider unimpeachable, it is learned that the new crop of tires built under war conditions is starting to come through. The new tires are stamped to differentiate between tires intended for the armed forces and those destined for the civilian rationing pool. The one will be a military tire and the other a war tire. The source said that the war tires would give about 60 per cent of the mileage of pre-war tires and would have to be carefully maintained to give that much. This is no cause for complaint; a war tire is better than none.

White HALF-TRACS IN Action

EQUIPPED WITH
WITTEK NOC-OUT HOSE CLAMPS

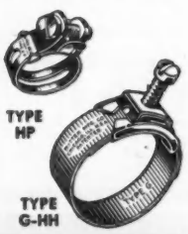
Climbing steep embankments, fording streams and speeding over boglands, these Half-Trac scout cars, manufactured by The White Motor Company for the U. S. Army, are equipped with Wittek Noc-Out Hose Clamps, and are proving their ability to stand the gaff and keep rolling under all conditions. Identified with the automotive and trucking industries for more than 20 years, Wittek Noc-Out Hose Clamps have established and maintained a standard of quality that guarantees a quick-tightening, perfect leakproof hose connection on radiators, heaters and booster brakes.



TYPE A — Adjustable. Recognized and accepted by the automotive industry as the standard replacement hose clamp for radiator connections, or any hose connection where an adjustable clamp is needed. Quick-tightening thumbscrew action provides easy installation with perfect leakproof seal.

TYPE G-HH — Solid band, designed especially for hose connections on all types of hot water heaters. Type G-BB— Solid band, heavy duty, for Booster Brakes.

TYPE HP — For gas station air hose, welding hose, etc., where a high pressure clamp is required.



WITTEK MANUFACTURING CO.
4305 W. 24th PLACE, CHICAGO, ILL.

When Overtime decides the winner-

The longest game in National Hockey League records was a championship play-off between the Detroit Redwings and the Montreal Maroons. It began at 8:30 in the evening of March 24, 1936, and neither team scored until 2:25 o'clock of the next morning. Then, after 116 minutes and 30 seconds of overtime play, Modere Bruneteau caged the puck on a pass from Hec Kilrea, winning for the Redwings 1 to 0.

• Trucks will be called on for plenty of overtime service this year, too. They'll be needed on the road for longer hours, carrying heavier loads, over extra miles, and on faster schedules. Our wartime effort requires more transportation, while new equipment becomes harder to obtain.

More than ever before, it's sound business to protect the appearance and efficiency of your trucks. Don't let carelessness and neglect hasten their depreciation. You can guard against the telltale marks that come from age and hard usage by regular repainting and touchup with fast, dependable, modern DeVilbiss Spray Systems. Remember, too, that DeVilbiss Service Equipment helps you to get speedier work and better results from all air-using maintenance and repair tools.

•

THE DEVILBISS COMPANY • TOLEDO, OHIO

Canadian Plant: WINDSOR, ONTARIO

DEVILBISS SPRAY SYSTEMS SERVICE EQUIPMENT

SPRAY PAINTING EQUIPMENT • EXHAUST SYSTEMS • AIR COMPRESSORS
• AIR, PAINT, OIL, GASOLINE, WATER AND WELDING HOSE • HOSE CONNECTIONS
• OIL AND DUSTING GUNS • PAINT STRIPERS

CCJ NEWSCAST

New Wage and Hour Overtime Ruling

Mechanics, loaders, and drivers' helpers are included with drivers as the employees of common and contract carriers engaged in transportation in interstate commerce whom the Wage and Hour Division, U. S. Department of Labor, considers exempt from the overtime provisions of the Fair Labor Standards Act.

This was announced last month by L. Metcalfe Walling, Administrator, in releasing a revised edition of the Division's Interpretative Bulletin No. 9 dealing with the application of the Wage-Hour Law to employees of motor carriers.

In the previous edition of the Interpretative Bulletin, the opinion was expressed that only the drivers were subject to exemption from overtime. The Interstate Commerce Commission has made a finding that mechanics, loaders, and drivers' helpers also affect safety of operation, thus subjecting these employees to hour regulations of the ICC.

Mr. Walling emphasized, however, that the overtime exemption does not apply to mechanics, loaders, and drivers' helpers employed by private carriers. These employees, if covered by the Act must not only be paid in accordance with the law's minimum wage requirements, but must also receive the overtime rate of time and one-half their regular hourly rate of pay for work in excess of 40 hours per week.

Drivers of private carriers engaged in transportation in interstate commerce are considered exempt from the overtime provisions, since their hours, like those of drivers of common and contract carriers engaged in transportation in interstate commerce, are regulated by the Interstate Commerce Commission.

A NEW WAY TO
SLASH
FLEET COSTS
● CUT cost of gas and oil per mile . . . hammer down repair and replacement expense . . . get more pay-load hours from every unit of your fleet.
National Refining's new periodic Inspection Program, Cost Record System and Lubrication Service puts fleet operation on a "stop-waste" basis. This program has proved that it can save enough on fuel to more than pay for itself. Even greater savings on repairs and replacements.
This new service heads off expense by getting detailed reports in your hands at regular periods . . . full information on what to do to reduce fleet operating and maintenance costs to a NEW low level! Facts are startling . . . and we can PROVE their accuracy. Ask for the complete story!
FREE! A QUART OF EN-AR-CO TUNE
To Start You on the Road to Lower Operating Costs!
This new upper-motor lubricant frees gum-stuck valves . . . releases carbon-bound rings . . . restores compression and power. Your driver will "FEEL THE DIFFERENCE" in power . . . smoothness . . . and pull.
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MAIL THIS COUPON TODAY
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Send me a free trial quart of En-Ar-Co Tune. Also complete facts about the NEW Fleet Periodic Inspection Program, Cost Record System, and Lubrication Service.
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Title
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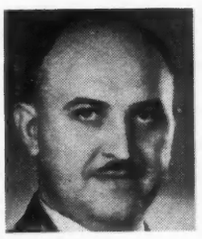
★ NATIONAL EN-AR-CO MOTORS OILS and LUBRICANTS ★



Andrew S. Ormsby has been appointed personnel director of Bendix-Westinghouse Air Brake Co. He will also serve as general counsel

Ross H. Wilson, of Wilson Advertising Agency has accepted a Captaincy in the Army and is now stationed at Fort Ben Harrison, Ind.

G. Corson Ellis has been elected to the Board of Directors of the Trailer Company of America. He has had 20 years' industrial management experience

Correction on Julian Frey and Errol Gay

Both Julian J. Frey and Errol J. Gay were erroneously reported in the March issue of COMMERCIAL CAR JOURNAL as being connected with the Globe Hoist Co., whereas, in fact, they are with the Ethyl Gasoline Corp. Mr. Frey was recently appointed director of Ethyl's new technical service department and chairman of the company's war committee. Mr. Gay was promoted to manager of Ethyl's bus and truck division. Mr. Frey's technical service department is composed of five divisions with newly appointed managers named as follows:

C. G. Krieger, manager, agricultural division; John C. Pope, manager, gasoline testing division; Richard K. Scales, manager, passenger car and automotive accessories division; W. L. Hubner, manager, technical division.

Ralph C. Champlin has been appointed director of advertising.

(TURN TO PAGE 160, PLEASE)

ELECTRICAL EQUIPMENT

TEST SPECIFICATIONS

P. 85 • • GENERATORS • •

P. 91 • CHARGING CONTROLS •

P. 94 • • DISTRIBUTORS • •

P. 98 • • • STARTERS • • •

GENERATORS

GENERATOR ABBREVIATIONS

*—Output at given speed—not necessarily maximum output.
‡—Field current at 32 volts.
§—Maximum R.P.M. for 8 Amps. at 15.0 volts.
°—At 13 Volts.
†—Maximum R.P.M. for 8 amperes at 8 volts.
Cold test given at 70° F. For each 15° above this, subtract one ampere.
•—Field current at 12 volts.
††—Field current at 26 volts.
■—Fixed third brush unit, 6.0 volts.
¶—Field current at 24 volts.

GENERATOR MAKE AND MODEL	MAXIMUM OUTPUT						
	Field Amps. at 6 Volts	COLD			HOT		
		Amps.	Volts	R.P.M.	Amps.	Volts	R.P.M.
AUTO-LITE							
DG-4021	2.38-2.63	28.6-30.6	8.0	1600	22.0-24.0	8.0	1850
DG-4023	2.38-2.63	28.6-30.6	8.0	1600	22.0-24.0	8.0	1850
DG-4302	2.38-2.63	28.6-30.6	8.0	1600	22.0-24.0	8.0	1850
DG-4310	2.38-2.63	28.6-30.6	8.0	1600	22.0-24.0	8.0	1850
DG-4311	2.38-2.63	22.0-24.0	8.0	1650	18.4-20.4	8.0	1800
DGA-4302	2.56-2.84	29.5-31.5	8.0	2250	23.8-25.8	8.0	2500
DGA-4601	2.56-2.84	29.5-31.5	8.0	2250	23.8-25.8	8.0	2500
GAM-4504	3.89-4.31	15.5-17.5	8.0	2050	12.8-14.8	8.0	2050
GAM-4504B	3.89-4.31	15.5-17.5	8.0	2050	12.8-14.8	8.0	2050
GAR-4315	3.51-3.89	15.0-17.0	8.0	2300	13.0-15.0	8.0	2370
GAR-4515	3.51-3.89	15.0-17.0	8.0	2300	13.0-15.0	8.0	2370
GAR-4522	3.51-3.89	15.0-17.0	8.0	2300	13.0-15.0	8.0	2370
GAR-4525	3.51-3.89	15.0-17.0	8.0	2300	13.0-15.0	8.0	2370
GAR-4543	3.51-3.89	15.0-17.0	8.0	2300	13.0-15.0	8.0	2370
GAR-4545	3.51-3.89	15.0-17.0	8.0	2300	13.0-15.0	8.0	2370
GAR-4607	3.70-4.10	19.0-21.0	8.0	2400	17.0-19.0	8.0	2500
GAR-4608C	3.51-3.89	20.4-22.4	8.0	2500	16.4-18.4	8.0	2500
GAR-4608E	3.51-3.89	20.4-22.4	8.0	2500	16.4-18.4	8.0	2500
GAR-4609B	3.75-4.15	22.4-24.4	8.0	2450	19.0-22.0	8.0	2700
GAR-4614-5	3.51-3.89	20.4-22.4	8.0	2500	16.4-18.4	8.0	2500
GAR-4622	3.70-4.10	19.0-21.0	8.0	2400	17.0-19.0	8.0	2500
GAR-4623	3.75-4.15	22.4-24.4	8.0	2450	19.0-22.0	8.0	2700
GAR-4624	3.51-3.89	20.4-22.4	8.0	2500	16.4-18.4	8.0	2500
GAR-4631	3.51-3.89	20.4-22.4	8.0	2500	16.4-18.4	8.0	2500
GAR-4635	3.51-3.89	20.4-22.4	8.0	2500	16.4-18.4	8.0	2500
GAS-4139A	3.80-4.20	13.3-15.3	8.0	2950	9.5-11.5	8.0	2950
GBB-4304	3.32-3.68°	16.0-18.0	15.0	1350	13.0-15.0	15.0	1500
GBD-4002	2.0 -2.2	20.0-22.0	8.0	1900	16.0-18.0	8.0	2050
GBE-4601	2.75-3.05°	14.0-16.0	15.0	2350	10.0-12.0	15.0	2600
GBG-4601	1.38-1.52°	40.0	15.0	1065	40.0	15.0	1120
GBG-4602	1.38-1.52°	40.0	15.0	1065	40.0	15.0	1120
GBG-4603	1.38-1.52°	40.0	15.0	1065	40.0	15.0	1120
GBG-4604	1.38-1.52°	40.0	15.0	1065	40.0	15.0	1120
GBG-4606	1.38-1.52°	40.0	15.0	1065	40.0	15.0	1120
GBG-4606A	1.38-1.52°	40.0	15.0	1065	40.0	15.0	1120
GBG-4611A	1.38-1.52°	40.0	15.0	1065	40.0	15.0	1120
GBM-4601	3.80-4.20	19.0-21.0	8.0	2100	17.0-19.0	8.0	2500
GBM-4602	3.80-4.20	19.0-21.0	8.0	2100	17.0-19.0	8.0	2500
GBM-4604A	3.80-4.20	17.0-19.0	8.0	2250	14.8-16.8	8.0	2550
GBM-4604B	3.80-4.20	17.0-19.0	8.0	2250	14.8-16.8	8.0	2550
GBM-4606	3.80-4.20	17.0-19.0	8.0	2250	14.8-16.8	8.0	2550
GBM-4606-1	3.89-4.20	17.0-19.0	8.0	2250	14.8-16.8	8.0	2550
GBM-4606B	3.80-4.20	17.0-19.0	8.0	2250	14.8-16.8	8.0	2550
GBM-4607A	3.80-4.20	17.0-19.0	8.0	2250	14.8-16.8	8.0	2550
GBM-4607B	3.80-4.20	17.0-19.0	8.0	2250	14.8-16.8	8.0	2550
GBM-4608A	3.80-4.20	19.0-21.0	8.0	2100	17.0-19.0	8.0	2500
GBM-4608B	3.80-4.20	19.0-21.0	8.0	2100	17.0-19.0	8.0	2500
GBM-4608D	3.80-4.20	19.0-21.0	8.0	2100	17.0-19.0	8.0	2500
GBM-4610A	3.80-4.20	14.0-16.0	8.0	2150	11.5-13.5	8.0	2400
GBM-4612A	3.80-4.20	19.0-21.0	8.0	2100	17.0-19.0	8.0	2500
GBR-4605	4.18-4.62	21.0-23.0	8.0	2650	18.5-20.5	8.0	2850
GBR-4606	4.18-4.62	21.0-23.0	8.0	2650	18.5-20.5	8.0	2850
GBR-4611	4.18-4.62	21.0-23.0	8.0	2650	18.5-20.5	8.0	2850
GBW-4602	1.66-1.84	22.0	8.0	1800	22.0	8.0	2450
GBW-4603D	1.66-1.84	22.0	8.0	1800	22.0	8.0	2450
GBW-4604A	1.66-1.84	22.0	8.0	1800	22.0	8.0	2450
GBX-4601	2.85-3.15	28.8-30.8	8.0	2050	24.9-26.9	8.0	2050
GBX-4601A	2.85-3.15	28.8-30.8	8.0	2050	24.9-26.9	8.0	2050
GBX-4602	2.85-3.15	28.8-30.8	8.0	2050	24.9-26.9	8.0	2050
GBY-4601	2.66-2.94	20.0-22.0	8.0	1300	17.8-19.8	8.0	1350
GBY-4602	2.66-2.94	20.0-22.0	8.0	1300	17.8-19.8	8.0	1350
GCB-4601	1.50-1.70	25.0	8.0	1030	25.0	8.0	1170
GCB-4602	1.50-1.70	25.0	8.0	1030	25.0	8.0	1170
GCB-4604	1.50-1.70	25.0	8.0	1030	25.0	8.0	1170
GCB-4608	1.50-1.70	25.0	8.0	1030	25.0	8.0	1170
GCB-4809A	1.50-1.70	25.0	8.0	1030	25.0	8.0	1170
GCB-4810A	1.50-1.70	25.0	8.0	1030	25.0	8.0	1170
GCB-4814A	1.50-1.70	25.0	8.0	1030	25.0	8.0	1170
GCB-4820	1.50-1.70	25.0	8.0	1030	25.0	8.0	1170
GCD-4801	1.37-1.52°	20.0	15.0	1110	20.0	15.0	1400
GCD-4803A	1.37-1.52°	20.0	15.0	1110	20.0	15.0	1400
GCE-4806	1.66-1.84	30.0	8.0	1500	30.0	8.0	1700
GCE-4807B	1.66-1.84	30.0	8.0	1500	30.0	8.0	1700
GCE-4808	1.66-1.84	30.0	8.0	1500	30.0	8.0	1700
GCE-4809	1.66-1.84	30.0	8.0	1500	30.0	8.0	1700
GCE-4810	1.66-1.84	30.0	8.0	1500	30.0	8.0	1700
GCE-4812	1.66-1.84	30.0	8.0	1500	30.0	8.0	1700
GCE-4814A	1.66-1.84	30.0	8.0	1500	30.0	8.0	1700
GCE-4815A	1.66-1.84	30.0	8.0	1500	30.0	8.0	1700

CONTINUED ON PAGE 86

CONTINUED FROM PAGE 85

GENERATOR TEST SPECIFICATIONS

GENERATOR MAKE AND MODEL	MAXIMUM OUTPUT						
	Field Amps. at 6 Volts	COLD			HOT		
		Amps.	Volts	R.P.M.	Amps.	Volts	R.P.M.
AUTO-LITE (Cont.)							
GCE-4816A	1.66-1.84	30.0	8.0	1500	30.0	8.0	1700
GCE-4817	1.66-1.84	30.0	8.0	1500	30.0	8.0	1700
GCE-4820A	1.66-1.84	32.0	8.0	1600	32.0	8.0	1800
GCH-4601	1.17-1.29	40.0	8.0	975	40.0	8.0	1050
GCH-4602	1.17-1.29	40.0	8.0	975	40.0	8.0	1050
GCH-4603	1.17-1.29	40.0	8.0	975	40.0	8.0	1050
GCH-4605	1.17-1.29	40.0	8.0	975	40.0	8.0	1050
GCH-4606	1.17-1.29	40.0	8.0	975	40.0	8.0	1050
GCH-4607A	1.17-1.29	50.0	8.0	1025	50.0	8.0	1125
GCH-4608	1.17-1.29	50.0	8.0	1025	50.0	8.0	1125
GCH-4609A	1.17-1.29	40.0	8.0	975	40.0	8.0	1050
GCH-4610B	1.17-1.29	40.0	8.0	975	40.0	8.0	1050
GCJ-4602B	1.90-2.10	24.0-26.0	8.0	2620	20.7-22.7	8.0	2850
GCJ-4802C	1.90-2.10	24.0-26.0	8.0	2620	20.7-22.7	8.0	2850
GCJ-4805A	1.90-2.10	24.0-26.0	8.0	2620	20.7-22.7	8.0	2850
GCJ-4805B	1.90-2.10	24.0-26.0	8.0	2620	20.7-22.7	8.0	2850
GCJ-4806	1.90-2.10	24.0-26.0	8.0	2620	20.7-22.7	8.0	2850
GCJ-4808A	1.90-2.10	24.0-26.0	8.0	2620	20.7-22.7	8.0	2850
GCJ-4811A	1.90-2.10	24.0-26.0	8.0	2620	20.7-22.7	8.0	2850
GCM-4802A	3.50-3.89	21.0-23.0	8.0	2650	17.0-19.0	8.0	2750
GCM-4804	3.50-3.89	21.0-23.0	8.0	2650	17.0-19.0	8.0	2750
GCM-4805	3.50-3.89	21.0-23.0	8.0	2650	17.0-19.0	8.0	2750
GCM-4807A	3.50-3.89	21.0-23.0	8.0	2650	17.0-19.0	8.0	2750
GCM-4808	3.50-3.89	21.0-23.0	8.0	2650	17.0-19.0	8.0	2750
GCM-4809A	3.50-3.89	21.0-23.0	8.0	2650	17.0-19.0	8.0	2750
GCM-4810	3.50-3.89	21.0-23.0	8.0	2650	17.0-19.0	8.0	2750
GCM-4815A	3.50-3.89	21.0-23.0	8.0	2650	17.0-19.0	8.0	2750
GCM-4816A	3.50-3.89	21.0-23.0	8.0	2650	17.0-19.0	8.0	2750
GCM-4819	3.50-3.89	21.0-23.0	8.0	2650	17.0-19.0	8.0	2750
GCM-4826	3.50-3.89	21.0-23.0	8.0	2650	17.0-19.0	8.0	2750
GCR-4802	1.47-1.63°	15.0	15.0	1565	15.0	15.0	.....
GCS-4802	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4802-5	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4803A-5	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4804A	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4804B	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4804D	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4804DA	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4805A	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4806A	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4808	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4809A	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4810	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4811A	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4812	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCS-4813A	3.56-3.94	19.0-21.0	8.0	2100	15.4-17.4	8.0	2250
GCW-4804A	1.35-1.50°	17.0	15.0	1170	17.0	15.0	1280
GDA-4801	1.66-1.84	28.0	8.0	2025	28.0	8.0	2525
GDA-4803	1.66-1.84	28.0	8.0	2025	28.0	8.0	2525
GDA-4803A	1.66-1.84	28.0	8.0	2025	28.0	8.0	2525
GDA-4804A	1.66-1.84	28.0	8.0	2025	28.0	8.0	2525
GDA-4810A	1.66-1.84	25.0	8.0	1880	25.0	8.0	2380
GDB-4805	3.23-3.57°	10.0-12.0	15.0	2050	8.8-10.8	15.0	2200
GDF-4801	1.90-2.10	29.0-32.0	8.0	3200	26.4-29.4	8.0	3400
GDF-4801C	1.90-2.10	29.0-32.0	8.0	3200	26.4-29.4	8.0	3400
GDF-4804B	1.90-2.10	29.0-32.0	8.0	3200	26.4-29.4	8.0	3400
GDF-4815A	1.90-2.10	29.0-32.0	8.0	3200	26.4-29.4	8.0	3400
GDJ-4802A	1.48-1.64°	55.0	15.0	1080	55.0	15.0	1180
GDJ-4803A	1.48-1.64°	55.0	15.0	1080	55.0	15.0	1180
GDJ-4804A	1.48-1.64°	55.0	15.0	1080	55.0	15.0	1180
GDJ-4805A	1.48-1.64°	55.0	15.0	1080	55.0	15.0	1180
GDJ-4806A	1.48-1.64°	55.0	15.0	1080	55.0	15.0	1180
GDJ-4808	1.48-1.64°	55.0	15.0	1080	55.0	15.0	1180
GDJ-4809A	1.48-1.64°	55.0	15.0	1080	55.0	15.0	1180
GDJ-4809B	1.48-1.64°	55.0	15.0	1080	55.0	15.0	1180
GDM-4803	1.41-1.56°	30.0	15.0	1275	30.0	15.0	1435
GDO-4601A	1.10-1.30	30.0	8.0	840	30.0	8.0	.....
GDT-4802	1.58-1.79	40.0	8.0	1350	40.0	8.0	1550
GDW-4601	.57-1.67††	10.0	30.0	925	10.0	30.0	.....
GDW-4601A	.57-1.67††	10.0	30.0	925	10.0	30.0	.....
GDZ-4801	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GDZ-4801C	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GDZ-4801D	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GDZ-4801H	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GDZ-4802	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GDZ-4802A	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GDZ-4804A	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GDZ-4805A	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GDZ-4807A	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GDZ-4808	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GDZ-4810A	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GDZ-4811A	1.60-1.78	30.0-36.7	8.0	2000	30.0-36.7	8.0	2350
GEB-4801A	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4801B	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4803B	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4804A	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4805A	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4806B	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4806C	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4806D	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4807	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4809	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4810	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4811A	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4813	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4814	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420

GENERATOR MAKE AND MODEL	MAXIMUM OUTPUT						
	Field Amps. at 6 Volts	COLD			HOT		
		Amps.	Volts	R.P.M.	Amps.	Volts	R.P.M.
GEB-4815A	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4816A	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4821A	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4822A	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4823	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4826A	1.60-1.78	25.0	8.0	1100	25.0	8.0	1230
GEB-4827	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4828A	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEB-4829A	1.60-1.78	32.0	8.0	1165	32.0	8.0	1420
GEG-4811A	1.60-1.78	40.0	8.0	1465	40.0	8.0	1690
GEG-4813	1.60-1.78	40.0	8.0	1465	40.0	8.0	1690
GEG-4814	1.60-1.78	40.0	8.0	1465	40.0	8.0	1690
GEG-4822	1.60-1.78	40.0	8.0	1465	40.0	8.0	1690
GEG-5001A	1.60-1.78	40.0	8.0	1465	40.0	8.0	1690
GEG-5002	1.60-1.78	40.0	8.0	1465	40.0	8.0	1690
GEH-4806	1.38-1.53°	17.0	15.0	1125	17.0	15.0	1240
GEW-4801	1.60-1.78	25.0	8.0	960	25.0	8.0	1250
GEW-4802	1.60-1.78	25.0	8.0	960	25.0	8.0	1250
GEW-4803A	1.60-1.78	25.0	8.0	960	25.0	8.0	1250
GEW-4804	1.60-1.78	25.0	8.0	960	25.0	8.0	1250
GEW-4805	1.60-1.78	25.0	8.0	960	25.0	8.0	1250
GEW-4806	1.60-1.78	25.0	8.0	960	25.0	8.0	1250
GEW-4806A	1.60-1.78	25.0	8.0	960	25.0	8.0	1250
GEW-4806B	1.60-1.78	25.0	8.0	960	25.0	8.0	1250
GEW-4806C	1.60-1.78	25.0	8.0	960	25.0	8.0	1250
GFL-4801	.83-.92††	5.0	30.0	1250	5.0	30.0	.....
DELCO-REMY							
417	1.35-1.48°	24-26	13.0	1600	18	13.0	3000
419	1.35-1.48°	24-26	13.0	1600	18	13.0	3000
440	1.39-1.47°	24-26	13.0	1100	18	13.0	3000
469	1.09-1.20°	40	13.0	1100	.....	.....	.....
508	1.78-1.92°	57	13.0	800	.....	.....	.....
511	1.78-1.92°	80	13.0	800	.....	.....	.....
518	1.78-1.92°	57	13.0	800	.....	.....	.....
519	1.78-1.92°	80	13.0	800	80	13.0	3000
530	1.09-1.20°	50	13.0	1700	.....	.....	.....
535	1.09-1.20°	40	13.0	1100	.....	.....	.....
538	1.09-1.20°	40	13.0	1100	.....	.....	.....
539	1.09-1.20°	40	13.0	1100	.....	.....	.....
550	1.35-1.48°	24-26	13.0	1600	18	13.0	3000
555	1.35-1.48°	24-26	13.0	1600	18	13.0	3000
556	1.35-1.48°	24-26	13.0	1600	18	13.0	3000
557	1.39-1.47°	13-15	13.0	1200	10	13.0	3000
560	1.12-1.23§	14	26.0	1000	.....	.....	.....
561	1.39-1.47°	24-26	13.0	1100	18	13.0	3000
563	3.53-3.75	40	7.0	950	.....	.....	.....
564	3.53-3.75	28-30	7.0	1000	22-24	7.0	1200
567	3.5-3.7	38-40	7.0	1500	30-32	7.0	1700
568	1.35-1.48°	24-26	13.0	1600	18	13.0	3000
603	1.2-1.3°	20	13.0	950	.....	.....	.....
604	3.53-3.75	28-30	7.0	1000	22-24	7.0	1200
605	1.26-1.33°	20	13.0	950	.....	.....	.....
606	1.26-1.33°	33	13.0	950	.....	.....	.....
607	1.26-1.33°	40	13.0	1250	.....	.....	.....
608	3.53-3.75	40	7.0	950	.....	.....	.....
609	3.53-3.75	40	7.0	950	.....	.....	.....
613	1.09-1.20°	40	13.0	1100	.....	.....	.....
614	1.58-1.71	50	7.5	800	.....	.....	.....
615	1.09-1.20°	40	13.0	1100	.....	.....	.....
616	3.53-3.75	28-32	7.0	1000	22-24	7.0	1200
622	1.09-1.20°	40	13.0	1100	.....	.....	.....
625	1.09-1.20°	40	13.0	1100	.....	.....	.....
630	1.09-1.20°	40	13.0	1100	.....	.....	.....
633	1.09-1.20°	40	13.0	1100	.....	.....	.....
634	1.09-1.20°	40	13.0	1100	.....	.....	.....
637	1.09-1.20°	40	13.0	1100	.....	.....	.....
639	1.09-1.20°	40	13.0	1100	.....	.....	.....
670	3.53-3.75	40	7.0	950	.....	.....	.....
671	3.53-3.75	40	7.0	950	.....	.....	.....
672	1.39-1.47°	40	13.0	1400	.....	.....	.....
673	3.53-3.75	40	7.0	950	.....	.....	.....
674	3.53-3.75	28-30	7.0	1000	22-24	7.0	1200
677	1.39-1.47°	24-26	13.0	1100	18	13.0	3000
678	1.39-1.47°	40	13.0	1400	.....	.....	.....
679	3.53-3.75	40	7.0	950	.....	.....	.....
680	3.53-3.75	40	7.0	950	.....	.....	.....
682	1.26-1.33°	33	13.0	950	.....	.....	.....
687	1.35-1.48°	24-26	13.0	1600	18	13.0	3000
688	3.53-3.75	40	7.0	950	.....	.....	.....
689	3.53-3.75	40	7.0	950	.....	.....	.....
690	1.26-1.33°	33	13.0	950	.....	.....	.....
691	1.39-1.47°	40	13.0	1400	.....	.....	.....
692	1.26-1.33°	40	13.0	1250	.....	.....	.....
693	1.26-1.33°	40	13.0	1250	.....	.....	.....
694	1.26-1.33°	33	13.0	950	.....	.....	.....
695	1.35-1.48°	24-26	13.0	1600	18	13.0	3000
696	1.26-1.33°	33	13.0	950	.....	.....	.....
697	1.39-1.47°	40	13.0	1400	.....	.....	.....
698	1.39-1.47°	40	13.0	1400	.....	.....	.....
699	1.26-1.33°	40	13.0	1250	.....	.....	.....
916B	1.25-1.45°	17	14.5-14.7	1250	.....	.....	.....
916D	1.7-2.0	28	8.0	1400	.....	.....	.....
916E	1.06-1.15°	17	14.5-14.7	1650	.....	.....	.....
916G	1.25-1.45°	17	14.5-14.7	1250	.....	.....	.....

CONTINUED ON PAGE 88

Don't lead with your chin! Be sure the job will be right .....use

Poor piston rings have ruined many fleet operating records. So—play safe. Use Sealed Power Engineered Ring Sets. These great sets are truly "individually engineered." They fit right, work right, do the job as you want it done. For better jobs use these better rings. You can't buy finer piston rings at any price.

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FOR ALL POPULAR MAKES OF CARS AND TRUCKS

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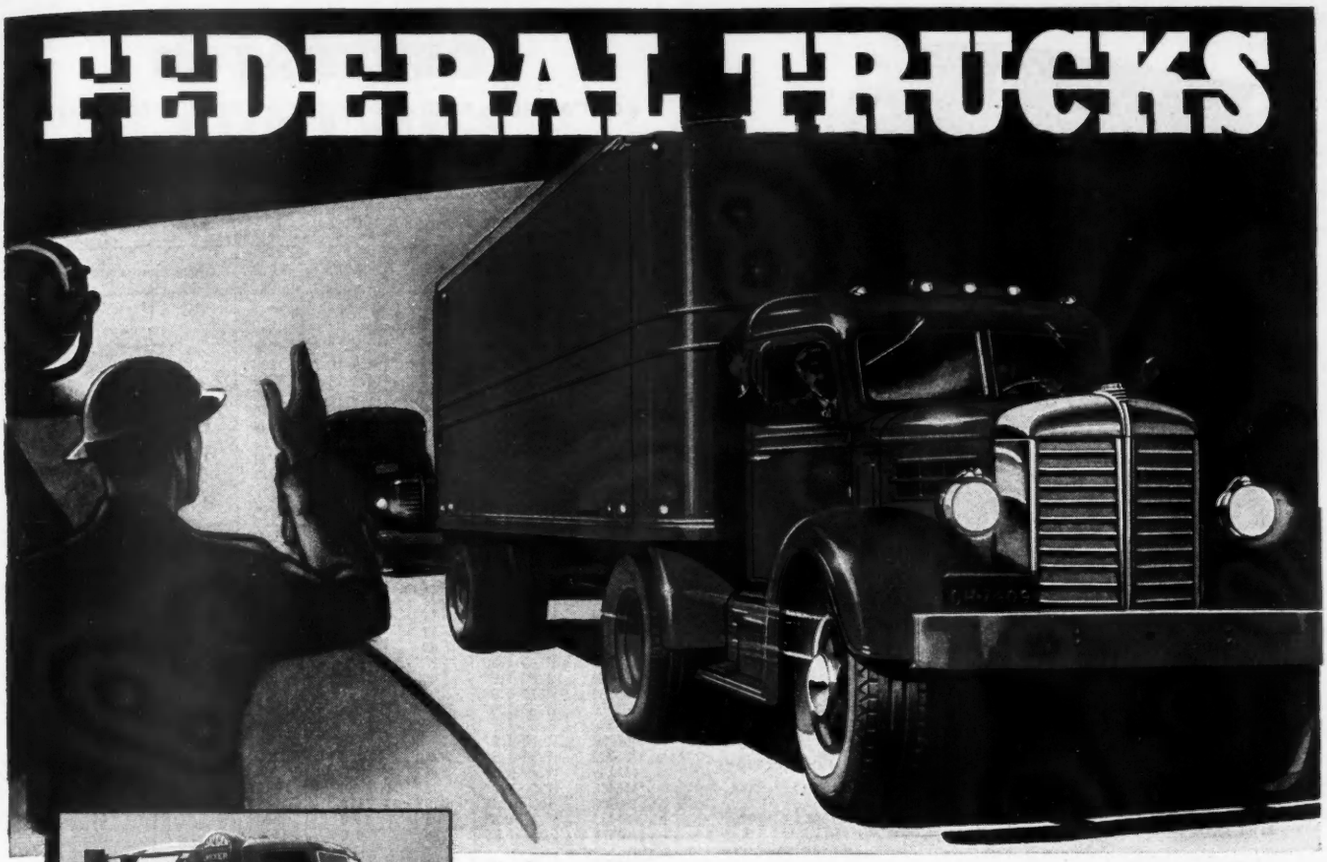
GENERATOR TEST SPECIFICATIONS

GENERATOR MAKE AND MODEL	MAXIMUM OUTPUT						
	Field Amps. at 6 Volts	COLD			HOT		
		Amps.	Volts	R.P.M.	Amps.	Volts	R.P.M.
DELCO-REMY (Cont.)							
918H	1.7-2.0	26	8.1-8.3	1325			
918J	1.25-1.45*	17	14.5-14.7	1250			
918K	1.7-2.0	26	8.1-8.3	1325			
925F	2.7-3.0	30	8.0	1800	28	8.0	1900
925H	2.7-3.0	30	8.0	1800	28	8.0	1900
927X	2.0-2.5*	16-18	13.0	2200	13-15	13.0	2500
928B	1.08-1.15*	17	14.5-14.7	1650			
930B	1.8-2.3	22	8.0	1100			
930C	1.08-1.15*	17	14.5-14.7	1650			
930G	1.8-2.3	28	8.0	1450			
930H	1.8-2.3	26	8.1-8.3	1450			
932A	2.7-3.0	25-28	9.0-9.4	1900	20-24	8.5-8.9	2100
932B	3.5-4.0	22-24	8.6-9.0	1300	13.5-16.5	7.7-8.1	1700
934A	1.7-2.0	28	8.0	1400			
934B	1.25-1.45*	17	14.5-14.7	1250			
934C	1.7-2.0	28	8.0	1400			
934D	1.25-1.45*	17	14.5-14.7	1250			
934E	1.7-2.0	28	8.0	1400			
934F	1.7-2.0	26	8.1-8.3	1325			
934G	1.25-1.45*	17	14.5-14.7	1250			
934H	1.7-2.0	28	8.0	1400			
934J	1.25-1.45*	17	14.5-14.7	1250			
934M	1.7-2.0	28	8.0	1400			
934N	1.25-1.45*	17	14.5-14.7	1250			
934P	1.7-2.0	28	8.0	1400			
934R	1.25-1.45*	17	14.5-14.7	1250			
934S	1.7-2.0	28	8.0	1400			
934T	1.25-1.45*	17	14.5-14.7	1250			
934U	1.7-2.0	28	8.0	1400			
934V	1.25-1.45*	17	14.5-14.7	1250			
934W	1.7-2.0	28	8.0	1400			
934X	1.25-1.45*	17	14.5-14.7	1250			
934Y	1.7-2.0	28	8.0	1400			
936P	2.3-2.6	18-21	8.2-8.5	2400	15-18	7.9-8.3	2900
936Z	2.3-2.6	17-20	8.2-8.5	2400	13-15	7.7-8.0	3000
938B	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
938M	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
938Z	2.3-2.6	19-23	8.4-8.8	2800	16-20	8.1-8.5	3100
937R	3.5-4.5	15-17	7.9-8.2	1700	10-12	7.4-7.7	1800
937Y	3.5-4.5	15-18	7.9-8.3	2000	13-15	7.7-8.0	2400
938E	4.0-6.1	15-17	7.9-8.1	1400	11-14	7.5-7.8	1750
938J	3.3-4.0*	15-18	15.9-16.6	2800	13-15	15.5-16.0	2800
938U	4.0-6.1	19-21	8.3-8.5	1800	9-12	7.3-7.6	2000
938Y	2.5-3.2*	8-10	14.4-14.6	1500	6-8	14.2-14.4	1900
941H	4.0-6.1	19-22	8.3-8.7	1550	9-12	7.3-7.7	1900
942H	4.0 -5.9	13-15	7.7- 8.0	1600	10-12	7.5- 7.7	1800
943J	3.5 -4.5	15-17	7.9- 8.2	1700	10-12	7.4- 7.7	1800
943V	3.5 -4.5	15-17	7.9- 8.2	1700	10-12	7.4- 7.7	1800
945S	4.0 -5.9	18-20	8.3- 8.5	1300	9-12	7.3- 7.6	1400
946W	2.5 -3.0*	6-8	14.9-15.2	1500	4-6	13.9-14.5	2000
946B	3.5 -4.5	15-18	7.9- 8.3	2000	13-15	7.7- 8.0	2400
946C	3.5 -4.5	15-17	7.9- 8.2	1700	10-12	7.4- 7.7	1800
946D	3.5 -4.5	15-17	7.9- 8.2	1700	10-12	7.4- 7.7	1800
946G	3.5 -4.5	15-18	7.9- 8.3	2000	13-15	7.7- 8.0	2400
946H	3.5 -4.5	19-22	8.3- 8.7	2400	12-15	7.6- 8.0	2800
946J	3.5 -4.5	15-17	7.9- 8.2	1700	10-12	7.4- 7.7	1800
946N	3.5 -4.5	15-17	7.9- 8.2	1700	10-12	7.4- 7.7	1800
946P	3.5 -4.5	15-17	7.9- 8.2	1700	10-12	7.4- 7.7	1800
946S	3.5 -4.5	15-17	7.9- 8.2	1700	10-12	7.4- 7.7	1800
948C	2.3 -2.6	19-23	8.4- 8.8	2800	16-20	8.1- 8.5	3100
948F	2.3 -2.6	17-20	8.2- 8.5	2400	13-15	7.7- 8.0	3000
948G	2.3 -2.6	23-27	8.8- 9.0	3000	18-23	8.2- 8.7	3200
948H	2.3 -2.6	23-27	8.8- 9.0	3000	18-23	8.2- 8.7	3200
948J	4.0 -6.1	19-22	8.3- 8.7	1550	9-12	7.3- 7.7	1900
948K	2.3 -2.6	17-20	8.2- 8.5	2400	13-15	7.7- 8.0	3000
948M	4.0 -6.1	19-22	8.3- 8.7	1550	9-12	7.3- 7.7	1900
948P	2.3 -2.6	19-23	8.4- 8.8	2800	16-20	8.1- 8.5	3100
948R	2.3 -2.6	19-23	8.4- 8.8	2800	16-20	8.1- 8.5	3100
948V	2.3 -2.6	17-20	8.2- 8.5	2400	13-15	7.7- 8.0	3000
952	1.5 -1.7*	54	13.0	1000			
953G	4.0 -6.1	19-22	8.3- 8.7	1550	9-12	7.3- 7.7	1900
953Y	4.0 -6.1	19-22	8.3- 8.7	1550	9-12	7.3- 7.7	1900
955	1.54-1.71*	54	13.0	1000			
956E	4.0 -6.1	19-22	8.3- 8.7	1550	9-12	7.3- 7.7	1900
956D	4.0 -6.1	20-22	8.4- 8.6	1550	10-12	7.4- 7.6	1700
956E	4.0 -6.1	20-22	8.4- 8.6	1550	10-12	7.4- 7.6	1700
957	1.5 -1.7*	54	13.0	1000			
957B	4.0 -5.9	18-20	8.3- 8.5	1300	9-12	7.3- 7.6	1400
957M	2.5 -3.0*	11-13	15.1-15.5	1700	7-9.5	14.2-14.8	2000
957T	4.0 -5.9	18-20	8.3- 8.5	1300	9-12	7.3- 7.6	1400
957W	2.8 -3.5	19-21	8.4- 8.6	1800	11-14	7.5- 7.8	2000
957X	2.5- 3.0*	11-13	15.1-15.5	1700	7-9.5	14.2-14.8	2000
957Y	1.75-2.25	17-20	8.2- 8.5	1900	13-15	7.7- 8.0	1900
957Z	2.8 -3.5	23-26	8.8- 9.2	1900	13-16	7.7- 8.1	2200
958A	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
958C	2.8 -3.5	18-20	8.2-8.5	2000	15-17	7.9- 8.2	2200
958D	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
958E	2.8 -3.5	18-20	8.2 -8.5	2000	15-17	7.9- 8.2	2200
959L	4.0 -6.1	19-22	8.3- 8.7	1550	9-12	7.3- 7.7	1900
959Y	4.0 -6.1	15-17	7.9- 8.1	1400	11-14	7.5- 7.8	1750
960A	2.3 -2.6	23-27	8.8- 9.0	3000	18-23	8.2- 8.7	3200
960B	2.3 -2.6	19-23	8.4- 8.8	2800	16-20	8.1- 8.5	3100
960C	2.3 -2.6	19-23	8.4- 8.8	2800	16-20	8.1- 8.5	3100
960D	2.3 -2.6	19-23	8.4- 8.8	2800	16-20	8.1- 8.5	3100
960E	2.3 -2.6	22-25	8.7- 9.1	3000	17-20	8.1- 8.5	3200
960F	3.5 -4.5	15-18	7.9- 8.3	2000	13-15	7.7- 8.0	2400
962	1.58-1.71	40	7.5	675			

GENERATOR MAKE AND MODEL	MAXIMUM OUTPUT						
	Field Amps. at 6 Volts	COLD			HOT		
		Amps.	Volts	R.P.M.	Amps.	Volts	R.P.M.
963	1.1 -1.2*	40	13.0	1100			
964	1.5 -1.7*	54	13.0	1000			
965A	2.5 -3.0*	11-13	15.1-15.5	1700	7-9.5	14.2-14.8	2000
965W	2.8 -3.5	23-26	8.8- 9.2	1900	13-16	7.7- 8.1	2200
965Z	2.5 -3.0*	8-10	14.5-15.5	1700	5-7	14.1-14.9	2000
966	1.5 -1.7*	54	13.0	1000			
967R	4.0 -5.9	18-20	8.3- 8.5	1300	9-12	7.3- 7.6	1400
967V	4.0 -6.9	18-20	8.3- 8.5	1300	9-12	7.3- 7.6	1400
967Y	2.8 -3.5	23-26	8.8- 9.2	1900	13-16	7.7- 8.1	2200
968B	2.5 -3.0*	14-16	15.7-16.1	1700	12-14	15.3-15.7	1850
968G	2.8 -3.5	22-25	8.7- 9.0	1800	13-16	7.8- 8.1	2000
968H	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
968J	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
968K	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
968P	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
968T	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
968V	4.0 -6.9	18-20	8.3- 8.5	1300	9-12	7.3- 7.6	1400
973E	1.8 -1.9	24-26	7.0	1600	19-21	7.0	1800
973G	.83-.89*	21-23	13.0	2400	16-18	13.0	2800
974	1.54-1.71*	54	13.0	1000			
975J	1.2 -1.3*	22-24	13.0	2000	15-17	13.0	2100
975S	1.5 -1.7	28-30	9.3- 9.6	2000	21-23	8.6- 8.9	2000
977E	.88-.63§	10	28.0	1200			
977J	1.5 -1.7	26-28	7.0	1400	21-23	7.0	1800
977K	1.53-1.67	17-19	7.0	1200	13-15	7.0	1200
977L	1.53-1.67	26-28	7.0	1400	21-23	7.0	1800
977P	1.53-1.67	26-28	7.0	1400	21-23	7.0	1800
977U	1.5 -1.7	30-31	7.0	2000	28-30	7.0	2100
977V	1.2 -1.3*	25-28	13.0	2600	23-26	13.0	3000
977Y	1.2 -1.3*	17-20	13.0	1500	13-16	13.0	1500
978A	1.53-1.67	17-19	7.0	1200	13-15	7.0	1200
SM1168	2.5 -3.2*	8-10	14.4-14.6	1500	6-8	14.2-14.4	1900
SM1298	1.1 -1.2*	50	13.0	1700			
SM1301	2.3 -2.5*	17-19	16.1-16.6	2200	13-15	15.6-16.0	2200
SM1322	1.3 -1.5*	16-18	16.1-16.5	2400	11-13	15.1-15.5	2800
SM1324	1.1 -1.2*	40	13.0	1100			
SM1329	1.1 -1.2*	40	13.0	1100			
SM1374	1.5 -1.7	17-19	7.0	1200	13-15	7.0	1200
SM1545	1.35-1.48*	24-26	13.0	1600	18	13.0	3000
SM1549	1.4 -1.5*	13-15	13.0	1200	10	13.0	3000
SM1616	1.2 -1.3*	22-24	13.0	2000	15-17	13.0	2100
SM1680	1.12-1.23§	14	26.0	1000			
SM1704	2.5 -3.0*	11-13	15.1-15.5	1700	7-9.5	14.2-14.8	2000
SM1795	2.3 -2.6	17-20	8.2- 8.5	2400	13-15	7.7- 8.0	3000
SM1803	4.4 -5.0	22-24	8.6- 9.0	1400	14-17	7.8- 8.2	1900
SM1884	1.4 -1.5*	24-26	13.0	1100	18	13.0	3000
SM1909	2.3 -2.6	19-23	8.4- 8.8	2800	16-20	8.1- 8.5	3100
1100004	2.3 -2.6	26-30	8.0	3400	25-28	8.0	3600
1100006	2.3 -2.6	26-30	8.0	3400	25-28	8.0	3600
1100008	2.3 -2.6	26-30	8.0	3400	25-28	8.0	3600
1100451	2.3 -2.6	19-23	8.4- 8.8	2800	16-20	8.1- 8.5	3100
1100452	2.3 -2.6	17-20	8.2- 8.5	2400	13-15	7.7- 8.0	3000
1100456	2.3 -2.6	19-23	8.4- 8.8	2800	16-20	8.1- 8.5	3100
1100458	2.3 -2.6	23-27	8.8- 9.0	3000	18-23	8.2- 8.7	3200
1100459	2.3 -2.6	18-21	8.2- 8.5	2400	15-18	7.9- 8.3	2900
1100463	2.3 -2.6	23-27	8.8- 9.0	3000	18-23	8.2- 8.7	3200
1101360	3.5 -4.5	15-17	7.9-8.2	1700	10-12	7.4- 7.7	1800
1101654	4.0 -6.1	19-22	8.3- 8.7	1550	9-12	7.3- 7.7	1900
1101702	2.6 -3.1*	11-13	15.0	2400	9-12	14.7-15.0	2600
1101708	2.6 -3.1*	11-13	15.0	2400	9-12	14.7-15.0	2600
1101710	2.5 -3.2*	8-10	14.4-14.6	1500	6-8	14.2-14.4	1900
1101714	1.5 -1.6*	18-21	15.0	3400	15-18	15.0	3500
1101716	2.5 -3.2*	8-10	14.4-14.6	1500	6-8	14.2-14.4	1900
1101729	1.5-1.67*	8-10	14.4-14.9	2200	6-8	14.1-14.5	2400
1101736	1.5 -1.6*	18-21	15.0	3400	15-18	15.0	3500
1101744	1.5-1.65*	18-21	15.0	3400	15-18	15.0	3500
1102402	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
1102403	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
1102404	4.0 -6.1	20-22	8.4- 8.6	1550	10-12	7.4- 7.6	1700
1102405	1.75-2.25	17-19	7.9- 8.1	1700	13-15	7.7- 8.0	1900
1102407	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
1102408	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
1102413	2.8 -3.5	18-20	8.2- 8.5	2000	15-17	7.9- 8.2	2200
1102501	2.5 -3.0*	11-13	15.1-15.5	1700	7-9.5	14.2-14.8	2000
1102514	2.5 -3.0*	11-13	15.1-15.5	1700	7-9.5	14.2-14.8	2000
1102520	2.5 -3.0*	11-13	15.1-15.5	1700	7-9.5	14.2-14.8	2000
1102660	1.8 -1.9	30▼	8.0	1700			
1102667	1.8 -1.9	30▼	8.0	1700			
1102670	1.8 -1.9	30▼	8.0	1700			
1102673	1.76-1.88	30▼	8.0	1700			
1102674	1.76-1.88	30▼	8.0	1700			
1102675	1.76-1.88	30▼	8.0	1700			
1102676	1.76-1.88	30▼	8.0	1700			
1102677	1.76-1.88	26▼	8.0	1450			
1102678	1.76-1.88	30▼	8.0	1700			
1102685	1.76-1.88	30▼	8.0	1700			
1102689	1.67-1.82	30▼	8.0	1750			
1102690	1.67-1.82	30▼	8.0	1750			
1102953	1.6 -1.7*	18▼	15.0	1480			
1102955	1.6-1.7*	18▼	15.0	1480			
1102957	1.6-1.7*	18▼	15.0	1480			
1102961	1.6 -1.7*	18▼	15.0	1480			
1105201	1.0-1.15*	17	14.5-14.7	1650			
1105529	1.7 -2.0	28	8.0	1400			
1105530	1.7 -2.0	28	8.0	1400			
1105532	1.7 -2.0	28	8.0	1400			
1105726	1.25-1.45*	17	14.5-14.7	1250			

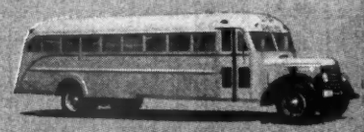
CONTINUED ON PAGE 90

FEDERAL TRUCKS



Road stamina and low cost operating efficiency are part of the standard equipment built into Federal Trucks.

Federal construction is all-truck construction—your assurance of huskier performance and consistent reliability.



Federal Trucks serve every possible job need—a wider range of models from medium to highest tonnage capacities.

Speed the Materials of War in Victory Bound Convoys!

NIGHT AND DAY the singing wheels of powerful motor trucks are matching the urgent needs of war production with a time table regularity that knows no halt.

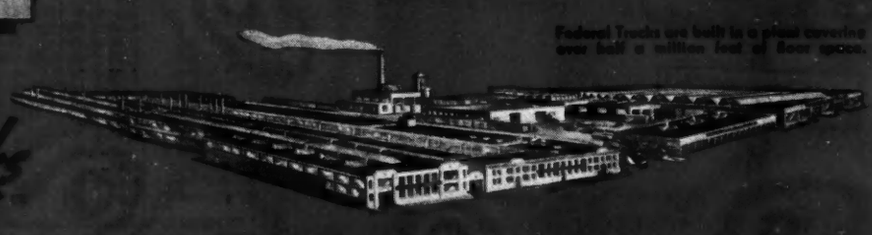
Wherever stamina, speed and reliability are needed to shoulder the added burdens of load and road, Federal Trucks play an increasingly important role in our Nation's all-out war effort. This is due to the emphasis which Federal engineers have always placed on the over-all *balanced* precision design in Federal Truck construction. You will find motors, axles, gear ratios, transmissions, clutches, running gear, chassis frames and springs accurately matched and engineered to meet individual job requirements. In this way Federal provides correctly *balanced* transport units—precision built and backed by 32 years of exclusive truck manufacturing experience.

Small wonder then, that Federal Trucks insure greater reliability coupled with low ton-mile costs to provide a value far beyond purchase price which pays out in extra performance and dependability.

FEDERAL MOTOR TRUCK CO., DETROIT, MICHIGAN

FEDERAL Trucks

SINCE 1910—Known in Every Country, Sold on Every Continent



Federal Trucks are built in a plant covering over half a million feet of floor space.

FEDERAL IS BUILDING MILLIONS OF DOLLARS' WORTH OF TRUCKS FOR UNCLE SAM

THIS SPARK PLUG CARE *helps* KEEP YOU ROLLIN'

For the sake of your war-time running schedules, keep these three simple rules in front of everyone who services your vehicles:

1. *Clean and regap all plugs every 4,000 miles.*
2. *Replace badly worn plugs promptly.*
3. *Correct the Heat Range of any plugs which show chronic fouling or cause preignition.*

Dirty or worn plugs waste gas,—as much as 1 gallon in 10. They also cause hard starting and loss of power. Plugs of the wrong Heat Range will cause intermittent missing, loss of power, and waste of gas.

Your AC supplier can deliver an AC Cleaning Machine, AC gap-setting tools, and AC plug cleaning compound promptly.

He can also supply AC plugs,—of *exactly* the correct Heat Range rating *to fit your engines.* And, when he does that, he will also be giving you plugs which can "take" heavy service *better* because of the aircraft plug features now incorporated in AC's.

"Keep 'em Rolling"

BEST BY TEST — AC SPARK PLUGS — SAVE GAS

Over the past ten years, AC's were used as standard factory equipment on more new cars and trucks than any other brand of spark plugs.

AC SPARK PLUG DIVISION · *General Motors Corporation*

GENERATOR

CONT'D FROM P. 88

TEST SPECIFICATIONS

GENERATOR MAKE AND MODEL	MAXIMUM OUTPUT						
	Field Amps. at 6 Volts	COLD			HOT		
		Amps.	Volts	R.P.M.	Amps.	Volts	R.P.M.
DELCO-REMY (Cont.)							
1105727	1.25-1.45*	17	14.5-14.7	1250			
1105732	1.25-1.45*	17	14.5-14.7	1250			
1105733	1.2 -1.4*	17	14.5-14.7	1250			
1105734	1.25-1.45*	17	14.5-14.7	1250			
1105735	1.25-1.45*	17	14.5-14.7	1250			
1105738	1.2- 1.4*	17	14.5-14.7	1250			
1105740	1.2- 1.4*	17	14.5-14.7	1250			
1105741	1.2 -1.4*	17	14.5-14.7	1250			
1105742	1.2 -1.4*	17	14.5-14.7	1250			
1105744	1.2 -1.4*	17	14.5-14.7	1250			
1105747	1.2 -1.4*	17	14.5-14.7	1250			
1105752	1.7 -2.0	28	6.1- 6.3	1325			
1105753	.63- .69§	5-7	26.0	2000	4.5- 6.5	26.0	2000
1105754	.84-.92‡	6-8	34.0	1800			
1105755	.84-.92‡	6-8	34.0	1800			
1105756	.63-.69§	5-7	26.0	2000	4.5- 6.5	26.0	2000
1105760	.63-.69§	5-7	26.0	2000	4.5- 6.5	26.0	2000
1105776	1.25-1.45*	17	14.5-14.7	1250			
1105778	1.25-1.45*	17	14.5-14.7	1250			
1105851	1.82-1.94	40	8.0	1850			
1105854	1.70-1.90	25▼	8.0	1150			
1105856	1.82-1.94	40	8.0	1850			
1105859	1.70-1.90	25▼	8.0	1150			
1106252	1.53-1.67	17-19	7.0	1200	13-15	7.0	1200
1106253	1.5 -1.7	30-31	7.0	2000	28-30	7.0	2100
1106254	1.53-1.67	17-19	7.0	1200	13-15	7.0	1200
1106255	1.53-1.67	17-19	7.0	1200	13-15	7.0	1200
1106403	1.8 -2.0	35	8.0	1040			
1106451	1.2 -1.3*	8	13.0	640			
1106452	1.2 -1.3*	16	15.0	1050			
1106455	1.2 -1.3*	8	13.0	640			
1106576	.91- .98	35	8.0	1400			
1106577	.91- .98	35	8.0	1400			
1106578	.91- .98	35	8.0	1400			
1106579	.91- .98	35	8.0	1400			
1106580	.91- .98	35	8.0	1400			
1106582	1.5 -1.7	40	7.5	1080			
1106583	1.5 -1.7	40	7.5	1080			
1106584	1.5 -1.7	40	7.5	1080			
1106585	1.5 -1.7	40	7.5	1080			
1106586	1.54-1.67	40	7.5	1080			
1106587	1.54-1.67	40	7.5	1380			
1106589	1.77-2.0	30	8.0	960			
1106590	1.54-1.67	40	7.5	1380			
1106591	1.54-1.67	50	7.5	1400			
1106593	.91- .98	35	8.0	1400			
1106626	1.2 -1.3*	25	13.0	1300			
1106627	1.20-1.27*	25	13.0	1200			
1106628	1.20-1.27*	25	13.0	1200			
1106629	1.2 -1.3*	25	13.0	1300			
1106630	1.20-1.27*	25	13.0	1200			
1106631	1.20-1.27*	25	13.0	1200			
1106632	1.20-1.27*	25	13.0	1200			
1106633	1.2 -1.3*	25	13.0	1300			
1106635	1.20-1.27*	25	13.0	1200			
1106636	1.20-1.27*	25	13.0	1200			
1106637	1.2 -1.3*	25	13.0	1300			
1106638	1.2 -1.3*	25	13.0	1300			
1106639	1.2 -1.3*	25	13.0	1300			
1106640	1.2 -1.3*	25	13.0	1300			
1106641	1.2 -1.3*	25	13.0	1300			
1106642	1.2 -1.3*	25	13.0	1300			
1106643	1.2 -1.3*	25	13.0	1300			
1106651	1.20-1.27*	25	13.0	1300			
1106653	1.2-1.27*	40	13.0	2300			
1106654	1.20-1.27*	25	13.0	1300			
1107013							
1117001	1.2 -1.3*	40	13.0	1250			
1117002	1.3 -1.5*	24-26	13.0	1600	18	13.0	3000
1117003	3.5 -3.7	29-32	7.0	1000	22-24	7.0	1200
1117004	1.2 -1.4*	40	13.0	1250			
1117005	1.26-1.33*	40	13.0	1250			
1117006	3.5 -3.7	40	7.0	950			
1117008	3.5 -3.7	40	7.0	950			
1117009	3.5 -3.7	40	7.0	950			
1117011	3.5 -3.7	29-30	7.0	1000	22-24	7.0	1200
1117012	1.26-1.33*	40	13.0	1250			
1117013	3.5 -3.7	40	7.0	950			
1117014	1.4 -1.6*	13-15	13.0	1200	16	13.0	3000
1117015	1.2 -1.3*	40	13.0	1250			
1117017	1.1 -1.2§	14	26.0	1000			
1117018	1.3 -1.6*	24-26	13.0	1600	18	13.0	3000
1117020	1.3 -1.6*	24-26	13.0	1600	18	13.0	3000
1117022	1.46-1.49*	16	13.0	1100			
1117028	1.26-1.33*	40	13.0	1250			
1117030	1.36-1.48	19-21	17.0	1200	15-17	15.9-16.4	1400
1117033	1.26-1.33*	40	13.0	1250			
1117202	.78- .84‡	25	35.0	1450			
1117203	.78- .84‡	25	35.0	1450			
1117204	1.1 -1.2*	40	13.0	1100			
1117501	1.78-1.92*	57	13.0	800	57	13.0	3000
1117502	.47- .53‡	40	35.0	1050			
1117503	.47- .53‡	40	35.0	1050			
1117507	1.8 -1.9*	57	13.0	800			
1117509	1.8 -1.9*	80	13.0	800			

(ELECTRICAL SPECIFICATIONS CONTINUED ON NEXT PAGE)

CHARGING CONTROLS

UNIT MODEL NUMBER	CUT-OUT RELAY		CURRENT REGULATOR *		VOLTAGE REGULATOR	
	Closing Volts	Opening Amps.	Point Open (Inches)	Current Setting (Amp.)	Voltage Setting Closed Circuit (†) Open Circuit (*) Volts-Points Open (°)	
AUTO-LITE					70°F.	110°F.
CB-4012	6.5- 7.2	.5-2.5				
CB-4013	13.0-14.5	.5-2.0				
CB-4014	6.5- 7.2	.5-2.5				
CB-4014C	6.5- 7.2	.5-2.5				
CB-4021	6.5- 7.2	.5-2.5				
CB-4025	6.5- 7.2	.5-2.5				
RA-4004	6.5- 7.2	.5-2.5				
TC-4301A	6.5- 7.2	.5-2.5			8.2- 8.7°	7.9- 8.4°
TC-4302A	6.5- 7.2	.5-2.5			8.2- 8.7°	7.9- 8.4°
TC-4303C	13.0-14.5	.5-2.0			16.6-17.4°	16.0-16.8°
TC-4306A	6.5- 7.2	.5-2.5			8.2- 8.7°	7.9- 8.4°
TC-4317A	6.5- 7.2	.5-2.5			8.2- 8.7°	7.9- 8.4°
TC-4320B	6.5- 7.2	.5-2.5			8.2- 8.7°	8.0- 8.4°
VRA-4102A	13.0-13.5	.5-6.0	.010 min.	39-41	14.3-14.6†	14.1-14.4†
VRB-4002C	6.4- 7.0	.5-3.0	.010-.020	24-26	7.3- 7.6†	7.2- 7.5†
VRB-4004B	6.4- 7.0	.5-3.0	.010-.020	27-29	7.3- 7.6†	7.2- 7.5†
VRB-4004C	6.4- 7.0	.5-3.0	.010-.020	24-26	7.3- 7.6†	7.2- 7.5†
VRB-4005A	6.4- 7.0	.5-3.0	.010-.020	21-23	7.3- 7.6†	7.2- 7.5†
VRB-4007A	6.4- 7.0	.5-3.0	.010-.020	29-31	7.3- 7.6†	7.2- 7.5†
VRB-4008A	6.4- 7.0	.5-3.0	.010-.020	29-31	7.3- 7.6†	7.2- 7.5†
VRB-4008B	6.4- 7.0	.5-3.0	.010-.020	24-26	7.3- 7.6†	7.2- 7.5†
VRB-4008E	6.4- 7.0	.5-3.0	.010-.020	31-33	7.3- 7.6†	7.2- 7.5†
VRB-4009A	6.4- 7.0	.5-3.0	.010-.020	24-26	7.3- 7.6†	7.2- 7.5†
VRB-4012A	6.4- 7.0	.5-3.0	.010-.020	27-29	7.3- 7.6†	7.2- 7.5†
VRC-4101A	6.5- 7.0	.5-4.0	.010 min.	39-41	7.3- 7.6†	7.2- 7.5†
VRC-4101B	6.5- 7.0	.5-4.0	.010 min.	49-51	7.3- 7.6†	7.2- 7.5†
VRD-4002A	6.4- 7.0	.5-3.0			7.3- 7.6†	7.2- 7.5†
VRD-4002B	6.4- 7.0	.5-3.0			7.3- 7.6†	7.2- 7.5†
VRD-4004A	6.4- 7.0	.5-3.0			7.3- 7.6†	7.2- 7.5†
VRD-4006B	6.4- 7.0	.5-3.0			7.3- 7.6†	7.2- 7.5†
VRE-4002A	13.0-13.7	.5-3.0	.010-.020	14-16	14.3-14.6†	14.2-14.5†
VRE-4002B	13.0-13.7	.5-3.0	.010-.020	16-18	14.3-14.6†	14.2-14.5†
VRE-4002C	13.0-13.7	.5-3.0	.010-.020	19-21	14.3-14.6†	14.2 14.5†
VRG-4102B	13.0-13.5	.5-6.0	.010 min.	25-27	14.3-14.6†	14.2-14.5†
VRG-4103B	13.0-13.5	.5-6.0	.010 min.	25-27	14.3-14.6†	14.2-14.5†
VRH-4101A	13.0-13.5	.5-6.0	.010 min.	54-56	14.3-14.6†	14.2-14.5†
VRH-4102A	13.0-13.5	.5-6.0	.010 min.	54-56	14.3-14.6†	14.2-14.5†
VRH-4104A-1	13.0-13.5	.5-6.0	.010 min.	54-56	14.3-14.6†	14.2-14.5†
VRK-4001A	26.0-26.7	.5-2.0	.010-.020	9.8-10.2	27.4-27.6†	26.7-26.9†
VRP-4001A	6.4- 6.6	4-6	.012 min.	34-36	7.2- 7.5†	7.1- 7.4†
VRP-4001B	6.4- 6.6	4-6	.012 min.	31-33	7.2- 7.5†	7.1- 7.4†
VRP-4001F	6.4- 6.6	4-6	.012 min.	39-41	7.2- 7.5†	7.1- 7.4†
VRP-4004A	6.4- 6.6	4-6	.012 min.	34-36	7.2- 7.5†	7.1- 7.4†
VRP-4004C	6.4- 6.6	4-6	.012 min.	31-33	7.2- 7.5†	7.1- 7.4†
VRP-4004E	6.4- 6.6	4-6	.012 min.	39-41	7.2- 7.5†	7.1- 7.4†
VRP-4004F	6.4- 6.6	4-6	.012 min.	34-36	7.2- 7.5†	7.1- 7.4†
VRP-4004G	6.4- 6.6	4-6	.012 min.	24-26	7.2- 7.5†	7.1- 7.4†
VRP-4005A	6.4- 6.6	4-6	.012 min.	34-36	7.2- 7.5†	7.1- 7.4†
VRP-4005B	6.4- 6.6	4-6	.012 min.	31-33	7.2- 7.5†	7.1- 7.4†
VRP-4005E	6.4- 6.6	4-6	.012 min.	39-41	7.2- 7.5†	7.1- 7.4†
VRP-4006A	6.4- 6.6	4-6	.012 min	29-31	7.2- 7.5†	7.1- 7.4†
VRP-4006E	6.4- 6.6	4-6	.012 min.	31-33	7.2- 7.5†	7.1- 7.4†
VRP-4006F	6.4- 6.6	4-6	.012 min	39-41	7.2- 7.5†	7.1- 7.4†
VRP-4007A	6.4- 6.6	4-6	.012 min.	31-33	7.2- 7.5†	7.1- 7.4†
VRP-4007B	6.4- 6.6	4-6	.012 min.	39-41	7.2- 7.5†	7.1- 7.4†
VRP-4009D	6.4- 6.6	4-6	.012 min.	24-26	7.2- 7.5†	7.1- 7.4†
VRP-4010A	6.4- 6.6	4-6	.012 min.	31-33	7.2- 7.5†	7.1- 7.4†
VRP-4102A	6.4- 6.6	4-6	.012 min.	21-23	7.2- 7.5†	7.1- 7.4†
VRR-4003A	6.4- 6.6	4-6			7.2- 7.5†	7.1- 7.4†
VRR-4004A	6.4- 6.6	4-6			7.2- 7.5	7.1- 7.4†
VRS-4004B	13.0-13.7	1-5	.012 min.	16-18	14.2-14.8†	14.0-14.6†
VRS-4005A	13.0-13.7	1-5	.012 min.	14-16	14.2-14.8†	14.0-14.6†
VRS-4005C	13.0-13.7	1-5	.012 min.	19-21	14.2-14.8†	14.0-14.6†
VRS-4006C	13.0-13.7	1-5	.012 min.	16-18	14.2-14.8†	14.0-14.6†
VRV-4001A	26.0-27.0	1.9-3.0	.012 min.	9.8-10.2	28.5=.50†	27.81=.50†
VRV-4101A	26.0-27.0	1.9-3.0	.012 min.	4.8- 5.2	28.0-29.0†	27.3-28.3†
VRY-4201A	6.4- 6.6	.5-6.0	.010 min.	25-27	7.2- 7.5†	7.1- 7.4†
VRY-4203A	6.4- 6.6	.5-6.0	.010 min.	39-41	7.2- 7.5†	7.1- 7.4†
DELCO-REMY					70°F.	150°F.
255B	7.0- 7.5	0-3.0				
255G	7.0- 7.5	0-3.0				
255H	7.0- 7.5	0-3.0				
256P	7.0- 7.5	0-3.0				
257B	13.5-14.0	0-2.0				
5524	13.5	0-3.0				15.0°
5526	13.5	0-3.0	.015	40		15.0°
5529	13.5	0-3.0	.015	18		15.0°
5530	13.5	0-3.0	.015	50		15.0°
5533	7.0	0-3.0				8.5°
5534	7.0	0-3.0				8.5°
5535	13.5	0-3.0				15.0°
5538	7.0	0-3.0				8.5°
5540	6.3- 6.9	0-3.0			8.3- 8.7°	7.7- 8.2°
5542	6.3- 6.9	0-3.0			8.3- 8.7°	7.7- 8.2°
5544	6.3- 6.9	0-3.0			8.3- 8.7°	7.7- 8.2°
5561	26.0	0-3.0	.015	14		30.0°
5562	26.0	0-3.0	.015	10		30.0°
5565	26.0	0-3.0	.015	25		30.0°
5567	7.0	0-3.0	.015	40		8.5°
5569	13.5	0-3.0	.015	30		15.0°
5571	13.6	0-3.0	.015	57		15.0°
5572	35.0	0-3.0	.015	28		40.0°

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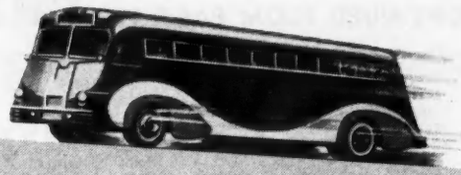

OVERHAUL LESS *Frequently*

WITH AC KLEER-KLEEN OIL FILTERS

You can substantially increase mileage between ring jobs and overhauls *if you keep the engine oil free from dirt.* And one way to do that is to replace your oil filter element, as soon as the oil gets dark, with an AC Kleer-Kleen renewal element.

AC Kleer-Kleen elements remove sludge, dust, dirt, and discoloration so effectively that you can safely rely on oil darkness as a guide to element renewal. This filtering efficiency keeps oil ring slots free. Thus, oil consumption is held down, gas economy is maintained, carbon formation is retarded, and overhauls are postponed.

War time is no time for equipment to be out of service. The cost is not only that of the overhaul alone, it's also the much greater cost of vital loads not being hauled.

So, equip every vehicle with an AC Kleer-Kleen Oil Filter . . . replace the elements as soon as the oil on the gauge stick obliterates the markings . . . and keep your equipment on the move.

AC FILTERS—*for Top Quality*
ARGO FILTERS—*at Lower Prices*

AVAILABLE FROM YOUR AC SUPPLIER

AC SPARK PLUG DIVISION • *General Motors Corporation*

CONTINUED FROM PAGE 91

CHARGING CONTROL TEST SPECIFICATIONS

UNIT MODEL NUMBER	CUT-OUT RELAY		CURRENT REGULATOR		VOLTAGE REGULATOR	
	Closing Volts	Opening Amps.	Point Open (Inches)	Current Setting (Amp.)	Voltage Setting Closed Circuit (†) Open Circuit (*) Volts-Points Open (˚)	
DELCO-REMY (Cont.)					70°F.	150°F.
5673	13.5	0-3.0				15.0*
5676	13.5	0-3.0	.015	33		15.0*
5677	7.0	0-3.0	.015	80		8.5*
5679	13.5	0-3.0	.015	55		15.0*
5584	6.3- 6.9	0-3.0			8.3- 8.7˚	7.7- 8.2˚
5585	6.3- 6.9	0-3.0			8.3- 8.7˚	7.7- 8.2˚
5590	6.3- 6.9	0-3.0			8.3- 8.7˚	7.7- 8.2˚
5596	6.9- 7.6	0-4.0	.020	20-22	7.0- 7.4†	6.9- 7.1†
5597	6.9- 7.6	0-4.0	.020	25-26	7.0- 7.4†	6.9- 7.1†
5598	12.8-14.4	0-4.0	.020	16-18	14.2-15.0†	14.1-14.5†
5599	6.9- 7.6	0-4.0	.020	26-28	7.0- 7.4	6.9- 7.1†
5600	6.9- 7.6	0-4.0			7.2- 7.6†	7.2- 7.4†
5604	13.5	0-3.0	.015	40		15.0*
5607	36.0	0-3.0	.015	40		40.0*
5628	6.5- 6.9	0-3.0	.015	25		7.5*
5632	13.5	0-3.0	.015	17		15.0*
5634	13.5	0-3.0	.015	55		15.0*
5637	13.5	0-3.0	.015	40		15.0*
5640	6.5- 6.9	0-3.0	.015	35		7.5*
5649	13.5	0-3.0	.015	40		15.0*
5800	6.3- 6.9	0-4.0			7.6- 8.0˚	7.5- 7.9˚
5801	12.8-14.4	0-4.0	.020	16-18	14.2-15.0†	14.1-14.5†
5803	6.9- 7.6	0-4.0			7.2- 7.6†	7.2- 7.4†
5805	6.3- 6.9	0-3.0			8.3- 8.7˚	7.7- 8.2˚
5806	12.3-13.7	0-4.0	.020	16-18	14.2-15.0†	14.1-14.5†
5810	6.9- 7.6	0-4.0	.020	24-26	7.0- 7.4†	6.9- 7.1†
5814	6.9- 7.6	0-4.0			7.5- 7.9†	7.4- 7.6†
5820	6.9- 7.6	0-4.0			7.2- 7.6†	7.2- 7.4†
5821	6.3- 6.9	0-4.0			7.6- 8.0˚	7.5- 7.9˚
5822	6.9- 7.6	0-4.0			7.2- 7.6†	7.2- 7.4†
5824	13.0-14.2	0-4.0			15.4-16.3˚	14.4-15.3˚
5826	12.8-14.2	0-4.0	.020	19-21	14.2-15.0†	14.1-14.5†
5828	6.3- 6.9	0-4.0	.020	26-28	7.0- 7.4†	6.9- 7.1†
5829	12.3-13.7	0-4.0	.020	7- 9	14.2-15.0†	14.1-14.5†
5830	6.3- 6.9	0-3.0			8.3- 8.7˚	7.7- 8.2˚
5836	12.3-13.7	0-4.0	.020	24-36	14.2-15.0†	14.1-14.5†
5841	12.3-13.7	0-4.0	.020	24-28	14.2-15.0†	14.1-14.5†
5847	6.9- 7.6	0-4.0	.020	34-36	7.0- 7.4†	6.9- 7.1†

UNIT MODEL NUMBER	CUT-OUT RELAY		CURRENT REGULATOR		VOLTAGE REGULATOR	
	Closing Volts	Opening Amps.	Point Open (Inches)	Current Setting (Amp.)	Voltage Setting Closed Circuit (†) Open Circuit (*) Volts-Points Open (˚)	
					70°F.	150°F.
5850	6.3- 6.9	0-3.0			8.3- 8.7˚	7.7- 8.2˚
5852	6.3- 6.9	0-4.0	.020	34-36	7.0- 7.4†	6.9- 7.1†
5854	6.9- 7.6	0-4.0	.020	29-31	7.0- 7.4†	6.9- 7.1†
5856	12.3-13.7	0-4.0	.020	14-16	14.2-15.0†	14.1-14.5†
5862	6.2- 6.8	0-4.0			7.3- 7.6†	7.2- 7.3†
5863	6.3- 6.9	0-4.0			7.6- 8.0˚	7.5- 7.9˚
5866	12.4-13.6	0-4.0			14.2-15.0†	14.1-14.5†
5870	6.2- 6.8	0-4.0			7.3- 7.6†	7.2- 7.3†
5877	6.3- 6.9	0-4.0	.020	28-30	7.0- 7.4†	6.9- 7.1†
5885	6.3- 6.8	0-4.0	.020	38-40	7.0- 7.4†	6.9- 7.1†
1118201	6.2- 6.7	0-4.0		32-34		7.2- 7.4†
1118202	6.2- 6.7	0-4.0		32-34		7.2- 7.4†
1118204	6.2- 6.7	0-4.0				7.2- 7.4†
1118206	6.2- 6.7	0-4.0				7.2- 7.4†
1118208	6.2- 6.7	0-4.0		28-30		7.0- 7.2†
1118209	12.4-13.4	0-4.0		16-18		14.0-14.2†
1118210	12.4-13.4	0-4.0		16-18		14.0-14.2†
1118212	6.2- 6.7	0-4.0		38-40		7.0- 7.2†
1118214	12.4-13.4	0-4.0		24-26		14.0-14.2†
1118215	6.2- 6.7	0-4.0		22-24		7.0- 7.2†
1118218	12.4-13.4	0-4.0		7- 9		14.0-14.2†
1118221	6.2- 6.7	0-4.0		26-28		7.0- 7.2†
1118222	6.2- 6.7	0-4.0		34-36		7.0- 7.2†
1118225	12.4-13.4	0-4.0		14-16		14.0-14.2†
1118227	12.4-13.4	0-4.0				14.0-14.2†
1118229	6.2- 6.7	0-4.0		34-36		7.0- 7.2†
1118230	6.2- 6.7	0-4.0		26-28		7.0- 7.2†
1118231	6.2- 6.7	0-4.0				7.2- 7.4†
1118232	6.2- 6.7	0-4.0		34-36		7.0- 7.2†
1118233	6.2- 6.7	0-4.0		24-26		7.0- 7.2†
1118234	6.2- 6.7	0-4.0		24-26		7.0- 7.2†
1118236	6.2- 6.7	0-4.0		26-28		7.0- 7.2†
1118237	6.2- 6.7	0-4.0		38-40		7.0- 7.2†
1118244	6.1- 6.4	0-4.0		48-50		6.8- 6.9†
1118245	12.4-13.0	0-4.0		38-40		13.6-13.8†
1118451	7.0	0-3.0	.015	40		8.5*
1118453	13.5	0-3.0	.015	40		15.0*
1118456	13.5	0-3.0	.015	50		15.0*
1118465	13.5	0-3.0	.015	25		15.0*

DISTRIBUTOR SPECIFICATIONS ON PAGE 94

OVERSIZE WHEEL STUDS TO KEEP 'EM ROLLIN'

When the threads are stripped or stud is broken off or when wheel flange holes and axle flange holes are worn, use a Champ-Items oversize or standard wheel stud.

No. 407-A OVERSIZE

For Chevrolet 1 and 1½-Ton Truck 1936 to 1939. Replaces No. 595646. For Ford Trucks and Tractors 1934 to 1942 (C996). Replaces No. 352728. Drill size 27/64" Tap, ½" USS. 13 Thd. Size 7/16" SAE x ½" USS x 1⅞" Long.

No. 407-B REPLACEMENT

Chevrolet Cap Screw No. 3653927—1 and 1½-Ton, 1940-'42.
International No. 10375VA—1½-Ton, 1932 to 1941. 1½ to 2-Ton, 1934 to 1939, 2 to 3-Ton, 1934 to 1939. Size ½" SAE x ½" USS x 1⅞" Long.

No. 407-C OVERSIZE

For Chevrolet 1½-Ton (2 Speed Axle) Trucks, 1939 to 1942.
For GMC 1½-Ton Trucks, 1935 to 1941. Drill Size 33/64" Tap, ½" USS 13 Thd. Replaces Nos. 3651377 and 664646. Size 7/16" SAE x ½ USS x 2¼" Long.

No. 407-D OVERSIZE

For GMC 1½"-Ton Trucks, 1939 to 1941 (When oil seal is used). Drill Size 17/32" Tap, 9/16" USS, 12 Thd. Replaces No. 2023789. Size 7/16" SAE x 9/16" USS x 2¼" Long.

No. 407-E OVERSIZE

For International 1 to 3½-Ton Trucks, 1933 to '40 and Other Heavy Duty Trucks. Drill Size 17/32" Tap, 9/16" USS 12 Thd. Replaces International No. 10375VA. Size ½" SAE x 9/16" USS x 2⅛" Long.

No. 407-F REPLACEMENT

Autocar No. 4BL287A, 2 to 4 ton.
Chevrolet No. 595646, 1 and 1½-Ton, 1936-'39.
Dodge Cap Screw No. 557423, L. F. 1937.
Dodge No. 598766, 1941-'42 1-Ton.
GMC No. 2015960, Yellow Coach, Model 739, '38.
Int'l. No. 94135H, ¾ and 1-Ton, 1939-'40-'41.
White No. 304139, Models 86-87-700-800-802-805-WA14-WA114. Size 7/16" USS x 7/16" SAE x 2" Long.

No. 407-G REPLACEMENT

Autocar No. 45A287, 2 to 4-Ton.
Dodge Cap Screw No. 565912, 2-Ton, 1935-'42.
GMC No. 664646, Yellow Coach Model 712—'34, Model 715—'37. GMC No. 2023789, Yellow Coach, Model 733—'36.
Int'l. Budd Wheel No. 55545H, 1½-2-Ton, '34-'39.
Timken Axle No. 56410, PA—X7. White No. A25757X, 706M Bus, '35-'39. White No. A32260X, Models WA18-WA118. White No. A42520X, Models 701-702-704-706. Size 7/16" USS x 7/16" SAE x 2½" Long.

HANDY METAL BOX ASSORTMENT NO. MB407

Contains 12 each of Nos. 407A to 407I inclusive and six each of stud dowels, nuts and lockwashers.

No. 407-H UNIVERSAL

For International 2 to 3-Ton. 1935-39. Replaces No. 55564H. Also used as a universal dowel stud by drilling and tapping deeper than standard hole. Replaces 7/16" Studs on heavy duty trucks when holes in axle flange are worn. Size ½" USS x ½" SAE x 2½" Long.

No. 407-I OVERSIZE

For ¾ and 1-Ton International Trucks, 1935 to 1939. 7/16" USS x ⅜" SAE x 1⅛" Long, 33/64" Drill Size. Tap 7/16" 14 Thread.

Nos. 407-A,B,C,F,G & I *List 20c each*
Nos. 407-D,E,H *List 35c each*

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CHAMP-ITEMS, Inc.
6191 MAPLE AVE., ST. LOUIS, MO.

Re-Conditioning CHAMP-ITEMS INC SHORT CUTS

On Tanks, Trucks and Trailers . . .

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DEFENSE deliveries demand trucks, tanks, trailers that "deliver." And as no delivery unit is more dependable than the hardware it uses, it is important that such units be equipped with Hansen Hardware, noted for its stay-ability under the most severe service conditions.

Simple in design—ruggedly built—easy and economical to apply—Hansen Hardware "delivers." It is so dependable, it often outlasts the body on which used! Result — lower repair and replacement costs — continual service — better truck performance.

Hansen makes a complete line of Commercial Body Hardware, including — Slamming Locks — Slam-and-Take-up Locks — Locks with Locking Cylinders — Side and Rear-Door Locks — Rotary Door Locks — Leaf-type, Round-Corner, Square-Corner, and Continuous Hinges— Regulators, Cab Locks, Sliding Door Hardware. What are YOUR requirements?

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No. 60-L Door Lock with Locking Cylinder and two keys Insures safe deliveries of merchandise, money or other valuables.

No. 85 Window Regulator. Straight-up lift. Rust-proof. Lead-coated channel. Enclosed mechanism. Made in five lengths.

No. 92 Slamming Lock with Flush Handle attached to centerpiece. For tank trucks, utility bodies and panel bodies.

No. 124-L Slam-and-Take-up Lock with Locking Cylinder and two keys. Take-up action of striker bolts assures solid, rattle-proof doors.

No. 125 Slam-and-Take-up Lock. For side or rear double doors. Double-Angle Striker Bolts keep doors silent and tight-shut.

No. 127 Slamming Lock. For tank-truck or utility body compartments with thin sheet metal doors. Easy to slam. Locks at top and bottom.

A. L. HANSEN MFG. CO.
5047 Ravenswood Ave.
CHICAGO, ILL.

ELECTRICAL TEST **DISTRIBUTORS** SPECIFICATIONS

AUTO-LITE

UNIT MODEL NUMBER	Contact Point Opening	Breaker Arm Tension (Oz.)	Centrifugal Advance Eng. deg. & R.P.M. At Start	Centrifugal Advance Eng. deg. & R.P.M. Maximum	Rotation Viewed From Top
IGB4011	.020	17-20	0@400	28@3300	CCW
IGB4304B	.020	17-20	0@600	20@2100	CCW
IGB4309A	.020	17-20	0@550	12@1800	CW
IGB4318	.020	17-20	0@600	20@3000	CCW
IGB4320	.020	17-20	0@550	12@1800	CW
IGB4328	.020	17-20	0@600	16@3000	CW
IGC4054D	.020	17-20	0@500	24@2400	CCW
IGC4062	.020	17-20	0@500	12@3200	CW
IGC4063	.020	17-20	0@500	12@3200	CW
IGC4064	.020	17-20	.....	.....	CW
IGC4065	.020	17-20	0@600	12@2300	CW
IGC4210A	.020	17-20	.....	.....	CW
IGC4214A	.020	17-20	0@600	22@2300	CCW
IGC4214B	.020	17-20	0@600	31@2400	CCW
IGC4220C	.020	17-20	0@600	22@2300	CCW
IGC4227A	.020	17-20	0@400	25@2300	CW
IGC4227C	.020	17-20	0@550	12@1800	CW
IGC4227E	.020	17-20	0@600	12@2300	CW
IGC4236A	.020	17-20	0@500	32@2900	CCW
IGC4236B	.020	17-20	0@500	17@2400	CCW
IGC4240B	.020	17-20	0@600	18@2000	CW
IGC4247	.020	17-20	0@600	22@2400	CW
IGC4253A	.020	17-20	0@600	12@2300	CW
IGC4253B	.020	17-20	0@550	12@1800	CW
IGC4253C	.020	17-20	0@500	18@1950	CW
IGC4272A-1	.020	17-20	0@550	12@1800	CW
IGC4274A	.020	17-20	0@600	12@2300	CW
IGC4275	.020	17-20	0@600	22@2300	CCW
IGC4283	.020	17-20	0@600	14@1800	CW
IGC4284A	.020	17-20	0@400	25@2300	CW
IGC4285	.020	17-20	0@600	24@2100	CW
IGC4285A	.020	17-20	0@550	12@1800	CW
IGC4286	.020	17-20	0@550	12@1800	CW
IGC4407D	.020	17-20	0@700	28@2900	CW
IGC4408	.020	17-20	0@700	28@3300	CW
IGC4409A	.020	17-20	0@600	22@2400	CW
IGC4418	.020	17-20	0@700	28@3300	CW
IGC4501	.020	17-20	0@700	24@2700	CW
IGC4501-1	.020	17-20	0@700	24@2700	CW
IGC4502	.020	17-20	0@700	28@3300	CW
IGC4502A-1	.020	17-20	0@530	30@2700	CW
IGC4506-1	.020	17-20	0@530	30@2700	CW
IGC4601	.020	17-20	0@500	17@2400	CCW
IGC4601-1	.020	17-20	0@500	17@2400	CCW
IGC4601-2	.020	17-20	0@500	17@2400	CCW
IGC4602	.020	17-20	0@500	17@2400	CCW
IGC4604	.020	17-20	0@1000	25@2300	CW
IGC4701	.020	17-20	0@550	12@1800	CW
IGC4701-1	.020	17-20	0@550	12@1800	CW
IGC4702A	.020	17-20	0@550	18@2400	CW
IGC4703-1	.020	17-20	0@700	20@2300	CW
IGC4704-1	.020	17-20	0@700	20@2300	CW
IGC4706	.020	17-20	0@500	22@3000	CCW
IGE4003	.020	17-20	0@400	30@2150	CCW
IGE4003F	.020	17-20	0@400	22@1600	CCW
IGE4003G	.020	17-20	0@500	25@1500	CCW
IGE4003H	.020	17-20	0@500	25@1500	CCW
IGE4007A	.020	17-20	0@550	12@1800	CW
IGE4015	.020	17-20	0@600	18@2000	CW
IGE4020	.020	17-20	0@550	12@1800	CW
IGS4007	.020	17-20	0@800	28@3400	CCW
IGS4010	.020	17-20	0@700	24@3500	CW
IGS4101B	.020	17-20	0@700	24@3500	CW
IGS4101B-1	.020	17-20	0@700	24@3500	CW
IGS4103A	.020	17-20	0@700	22@3700	CW
IGS4107	.020	17-20	0@700	24@3500	CW
IGS4107-1	.020	17-20	0@700	24@3500	CW
IGS4107A-1	.020	17-20	0@700	26@2900	CW
IGS4108	.020	17-20	0@700	24@3500	CW
IGS4108-1	.020	17-20	0@700	24@3500	CW
IGS4108A-1	.020	17-20	0@700	24@3500	CW
IGS4108B-1	.020	17-20	0@700	24@3500	CW
IGS4108C-1	.020	17-20	0@700	22@3700	CW
IGS4108D-1	.020	17-20	0@700	26@2900	CW
IGS4109	.020	17-20	0@700	22@3700	CW
IGS4109-1	.020	17-20	0@700	22@3700	CW
IGS4111-1	.020	17-20	0@700	22@3700	CW
IGS4112-1	.020	17-20	0@700	24@3500	CW
IGS4113-1	.020	17-20	0@700	24@3500	CW
IGS4114-1	.020	17-20	0@700	24@3500	CW
IGS4202-1	.020	17-20	0@700	24@3500	CW
IGS4202A-1	.020	17-20	0@700	22@2800	CW
IGS4202B-1	.020	17-20	0@700	24@3080	CW
IGS4203-1	.020	17-20	0@700	24@3500	CW
IGS4204-1	.020	17-20	0@700	22@3700	CW
IGW4005A	.020	17-20	0@550	12@1800	CW
IGW4006B	.020	17-20	0@800	18@2600	CW
IGW4008	.020	17-20	0@800	20@2100	CCW
IGW4011	.020	17-20	0@600	18@3000	CW
IGW4015A	.020	17-20	0@550	12@1800	CW
IGW4017	.020	17-20	0@600	14@2000	CW
IGW4018	.020	17-20	.....	.....	CCW
IGW4020	.020	17-20	0@800	13@2000	CCW
IGW4033	.020	17-20	0@550	12@1800	CW
IGW4038B	.020	17-20	0@550	12@1800	CW
IGW4045A	.020	17-20	0@550	12@1800	CW
IGW4101	.020	17-20	0@800	20@2800	CCW
IGW4105C	.020	17-20	0@800	20@4800	CW
IGW4107	.020	17-20	0@600	30@3000	CW
IGW4107A	.020	17-20	0@600	17@2400	CW
IGW4108	.020	17-20	0@600	30@2850	CCW
IGW4108A	.020	17-20	0@600	22@2400	CCW
IGW4109	.020	17-20	0@600	10@1400	CW
IGW4110	.020	17-20	0@800	18@2800	CW
IGW4110A	.020	17-20	0@800	18@2800	CW

(CONTINUED ON PAGE 96)

COMPARE the number of cylinders . . . pumping speed . . . size of tank — and you'll know why you can buy more for your dollar in a PAR. Check its quieter operation . . . freedom from vibration . . . constant motor alignment . . easy belt adjustment . . . convenient tank drain . . . simplified over-all design—and you'll see why it will give maximum economy throughout years of service.

For economy . . . you'll buy PAR!

"HOW TO BUY AN AIR COMPRESSOR" . . . *
FREE BOOK CHOCKED FULL OF WORTHWHILE TIPS—
GET YOUR COPY BEFORE BUYING . . . WRITE TODAY!

BE SCOTCH
BUY PAR

"THERMOID GIVES US BRAKES THAT STOP —plus longer mileage"

writes

ET & WNC

MOTOR TRANSPORTATION COMPANY

This letter tells its own story. It's one more indication of how Thermoid is licking today's tougher stopping problems for transportation leaders everywhere.

Test Thermoid Brake Linings out on just one of your units. Judge by results — and we believe you'll specify Thermoid regularly for all your units.

ET&WNC MOTOR TRANSPORTATION COMPANY

GENERAL OFFICE - 111 TIPTON STREET
JOHNSON CITY, TENNESSEE

December 2, 1941 jw
O-2130-B

Thermoid Company,
Trenton, New Jersey

Gentlemen:

We operate 120 units, mostly tractor-semi-trailer combinations, well over 3 million miles a year, over the roughest terrain in the South, crossing next to the highest peak east of the Rockies. We handle approximately 350,000 shipments a year on runs spider-webbed throughout the Appalachian Mountains to and from more than 25 terminals in 4 states.

Fast schedules in mountainous country with overloaded trucks certainly play havoc with brake lining, and out of the many brands of brake lining we have tried, Thermoid has proven by far the best. We have records to show that in some instances Thermoid has given us more than twice the mileage of other brands--but best of all, THERMOID GIVES US BRAKES THAT STOP.

Yours very truly,

ET & WNC MOTOR TRANSPORTATION COMPANY

H. S. Blackwell

H. S. BLACKWELL

Service Member ATA

Thermoid

CUSTOM-BUILT BRAKE LINING SETS • CBB SETS • THERMO-BLOCKS FOR HEAVIEST DUTY

★ THERMOID COMPANY ★ *Trenton, New Jersey* ★

CONTINUED FROM PAGE 94

DISTRIBUTOR TEST SPECIFICATIONS

UNIT MODEL NUMBER	Contact Point Opening	Breaker Arm Tension (Oz.)	Centrifugal Advance Eng. deg. & R.P.M. At Start	Centrifugal Advance Eng. deg. & R.P.M. Maximum	Rotation Viewed From Top
AUTO-LITE—Continued					
IGW4110B	.020	17-20	0@800	12@1800	CW
IGW4110C	.020	17-20	0@550	12@1800	CW
IGW4114A	.020	17-20	0@800	12@2300	CW
IGW4114B	.020	17-20	0@800	18@2600	CW
IGW4114C	.020	17-20	0@800	18@2600	CW
IGW4114D	.020	17-20	0@800	12@2300	CW
IGW4114E	.020	17-20	0@600	18@3000	CW
IGW4119	.020	17-20	0@600	30@3000	CW
IGW4119A	.020	17-20	0@600	17@2400	CW
IGW4123	.020	17-20	0@600	12@1800	CW
IGW4123B	.020	17-20	0@600	12@2300	CW
IGW4127	.020	17-20	0@600	15@2400	CCW
IGW4129	.020	17-20	0@600	19@3000	CCW
IGW4129A	.020	17-20	0@800	28@3400	CCW
IGW4137	.020	17-20	0@700	24@2000	CCW
IGW4138	.020	17-20	0@700	24@2000	CCW
IGW4147	.020	17-20	0@600	20@2800	CW
IGW4154	.020	17-20	0@800	14@2800	CCW
IGW4158	.020	17-20	0@700	24@2000	CW
IGZ4003-1	.020	17-20	0@700	26@2900	CW

NOW, MORE THAN EVER, YOU NEED THIS NEW

BEAR WHEEL ALINEMENT TESTER

TO GET MAXIMUM TIRE MILEAGE and TO CONSERVE RUBBER

So Fast You Can Test Daily; Takes Only 30 Seconds!

Now, only half-a-minute to check *tire scuff* on any of your trucks or cars. Just drive over platform—Read Dial; that's all! Dial is large, easy-to-read; close to eye level of driver. The Bear Wheel Alinement Tester indicates front and rear wheel misalinement; amount of side-slip or drag per mile; shows up bent rear axle housing. Tells you when service is needed—not *after* but *before* the damage is done.

Another Important Use—Double Check on Correction!

After *any* front-end work has been done, use the Bear Wheel Alinement Tester to accurately recheck adjustment. This is absolutely essential, in order to get maximum tire mileage. The approved way to Conserve Rubber—Save Parts—Prevent Accidents. Thousands of Bear Wheel Alinement Testers in daily use in Garages, Service Stations and by Fleet Operators. Low initial cost; no operating cost.

Bear Heavy Duty Wheel Alinement Tester

For all trucks, buses and cars. Completely automatic; trip device resets to zero so you can test one vehicle right after the other.

BEAR

★ ★ ★ ★ ★

Write for Free Folder . . . **BEAR MFG. CO., ROCK ISLAND, ILLINOIS**

UNIT MODEL NUMBER	Contact Point Opening	Breaker Arm Tension (Oz.)	Centrifugal Advance Eng. deg. & R.P.M. At Start	Centrifugal Advance Eng. deg. & R.P.M. Maximum	Rotation Viewed From Top
DELCO-REMY					
622D	.018-.024	17-21	2@600	16@2200	CW
622M	.018-.024	17-21	3@600	28@3000	CW
622R	.018-.024	17-21	2@700	14@2600	CCW
623D	.018-.024	17-21	3@600	20@2200	CW
623G	.018-.024	17-21	3@600	28@3000	CW
623H	.018-.024	17-21	1@600	17@2200	CCW
623K	.018-.024	17-21	2@600	20@3600	CW
623P	.018-.024	17-21	2@800	12@2800	CW
623R	.018-.024	.....	2@600	16@2200	CCW
625F	.018-.024	17-21	2@600	23@2400	CCW
625G	.018-.024	17-21	2@600	24@2400	CW
625H	.018-.024	17-21	2@600	16@2200	CW
625J	.018-.024	17-21	2@800	18@2000	CCW
625M	.018-.024	20	2@600	23@2400	CCW
632S	.018-.024	17-21	2@900	28@2700	CW
640C	.018-.024	17-21	1@600	20@2000	CW
640L	.018-.024	17-21	2@400	22@2200	CCW
640Z	.018-.024	17-21	1@600	20@2000	CW
642S	.018-.024	17-21	2@600	16@2200	CW
642T	.018-.024	17-21	2@600	20@2800	CW
643F	.018-.024	17-21	2@800	16@2200	CW
643X	.018-.024	17-21	2@690	24@2550	CW
644B	.018-.024	17-21	2@400	20@1600	CW
644C	.018-.024	17-21	2@400	20@1600	CW
644M	.018-.024	17-21	2@600	18@2900	CW
644S	.018-.024	17-21	2@600	16@2200	CW
644V	.018-.024	17-21	4@500	32@1900	CCW
644X	.018-.024	17-21	3@500	34@3200	CW
645E	.018-.024	17-21	2@500	22@2200	CW
645G	.018-.024	17-21	1.5@600	32@3000	CW
645J	.018-.024	17-21	2@600	27@3200	CCW
645K	.018-.024	17-21	2@600	14@3200	CW
645S	.018-.024	17-21	2@400	31@3200	CW
645T	.018-.024	17-21	2.2@600	28@3000	CW
645V	.018-.024	20	2@400	22@2400	CW
645Y	.018-.024	17-21	2@600	20@2800	CW
645Z	.018-.024	17-21	.....	.....	CW
647D	.018-.024	19-23	4@800	28@4000	CCW
647F	.018-.024	17-21	2@400	28@3800	CCW
647G	.018-.024	20	3@500	27@2400	CW
647H	.018-.024	20	2@600	20@2600	CW
647K	.018-.024	17-21	3@500	27@2400	CW
647L	.018-.024	17-21	3@500	27@2400	CW
649C	.018-.024	.....	1@400	27@1800	CW
649E	.018-.024	17-21	3@600	17@2200	CW
649F	.018-.024	17-21	2@400	22@2400	CW
649G	.018-.024	.....	1.7@600	50@3600	CW
649N	.018-.024	20	2@800	17@2400	CW
649R	.018-.024	.....	2@700	28@2100	CW
649S	.018-.024	.....	.5@300	22@1800	CW
649T	.018-.024	17-21	2.5@400	36@2800	CW
649U	.018-.024	20	2@600	22@2200	CW
649V	.018-.024	20	2@600	20@2400	CW
649W	.018-.024	17-21	2@400	22@2400	CW
649X	.018-.024	17-21	2@400	22@2400	CCW
649Y	.018-.024	17-21	3@500	34@3200	CW
666H	.018-.024	17-21	2@400	24@1600	CCW
696D	.018-.024	17-21	1@600	20@2000	CW
696F	.018-.024	17-21	1@600	20@2000	CW
4097	.018-.024	17-21	2@400	12@1400	CW
4119	.018-.024	17-21	3@500	34@3200	CW
4126	.018-.024	17-21	2@400	12@1400	CCW
4127	.018-.024	17-21	1@600	20@2000	CW
4128	.018-.024	17-21	1@600	20@2000	CW
4130	.018-.024	17-21	2@400	12@1400	CW
4140	.018-.024	17-21	2@400	32@2000	CW
4150	.018-.024	17-23	3@500	22@1800	CW
4152	.018-.024	20	3½@800	21½@1400	CW
4154	.018-.024	20	2@400	22@2200	CCW
4171	.018-.024	17-23	2@600	16@2200	CW
4172	.018-.024	17-21	2@700	14@2600	CCW
4173	.018-.024	17-21	3@600	28@3000	CW
4174	.018-.024	.....	.5@300	22@1800	CW
4175	.018-.024	17-23	2@700	28@2100	CW
4176	.018-.024	.....	1@400	27@1800	CW
4177	.018-.024	17-23	2@500	38@2400	CW
4186	.018-.024	17-21	2@400	24@1600	CCW
4194	.018-.024	17-23	1@600	20@2000	CW
4199	.018-.024	17-21	2@400	12@1400	CCW
4204	.018-.024	17-21	1@600	20@2000	CW
4205	.012-.017	.....	2@500	30@2050	CCW
4209	.018-.024	.....	2@400	24@1400	CCW
4210	.018-.024	17-23	1.5@600	20@2800	CCW
4213	.018-.024	17-23	2@400	24@1400	CCW
4225	.018-.024	17-23	2@400	20@1600	CW
4233	.018-.024	17-23	2@700	24@2800	CW
SM1141	.018-.024	17-21	1@600	20@2000	CW
SM1243	.018-.024	17-21	2@600	14@2200	CW
SM1282	.018-.024	17-21	3@500	28@2200	CW
SM1310	.018-.024	17-21	2@400	12@1400	CW
SM1325	.018-.024	17-21	.....	.....	CW
SM1498	.018-.024	17-21	.....	.....	CW
SM1524	.018-.024	17-21	2@400	12@1400	CW
SM1540	.018-.024	17-21	8@600	32@2900	CW
SM1659	.018-.024	17-21	2@400	12@1400	CCW
SM1693	.018-.024	17-21	2@400	20@1600	CW
SM1882	.018-.024	17-21	1@600	20@2000	CW
SM1886	.018-.024	17-21	2@500	22@2200	CW

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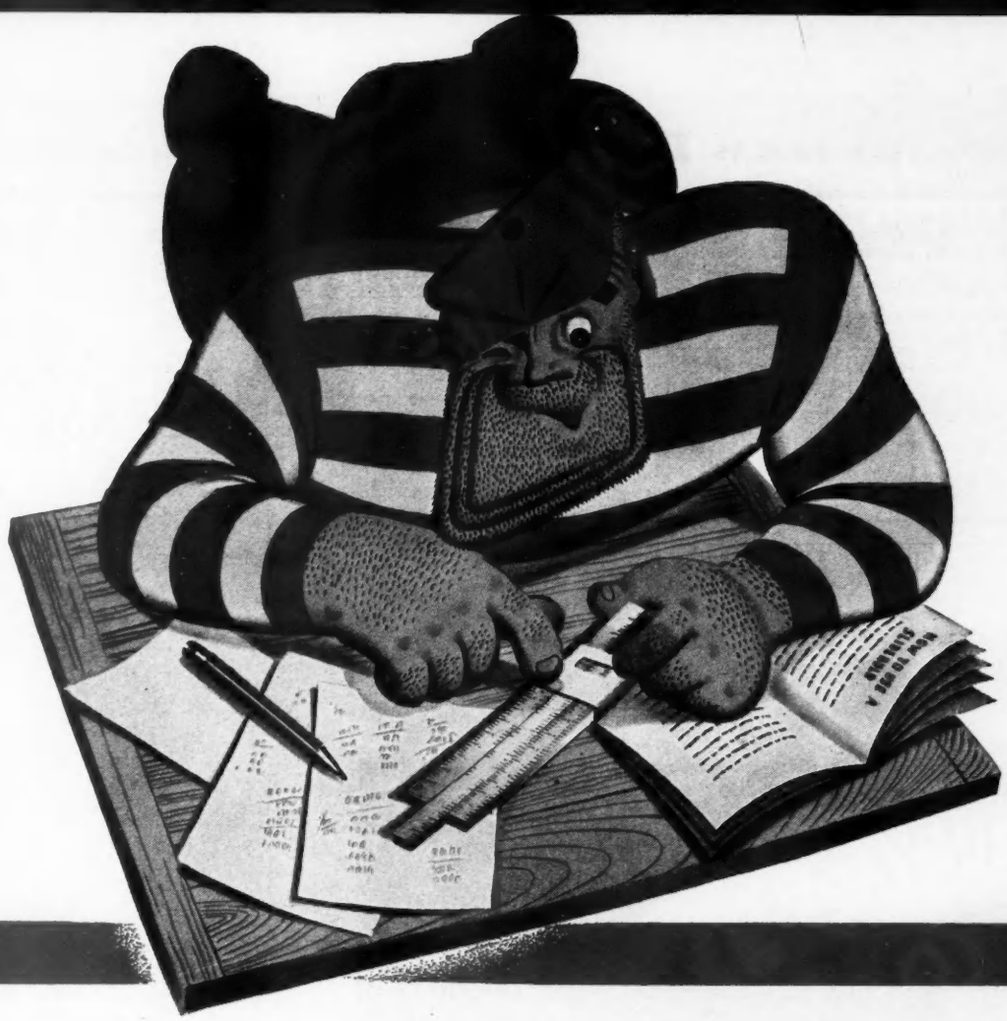

HASTINGS MOTOR ENGINEERED SETS

for vehicles which must "pay their way"

● No matter whether your units haul passengers or freight, they must pay their way—and piston rings play a major part in determining the final score. Steel-Vent Motor Engineered Sets have established a notable record for long life and economical performance. They stop oil-pumping and check cylinder wear in rebored, resleeved and extremely tapered cylinders.

Play safe. Standardize on Hastings Steel-Vent Motor Engineered Sets.

MOTOR ENGINEERED SETS—Are complete, boxed sets of selected combinations of Hastings Rings "Motor Engineered" to meet the individual requirements of the motor in which they are to be installed. Available for most models of cars, trucks and buses.

HASTINGS MANUFACTURING COMPANY, HASTINGS, MICHIGAN
Hastings Mfg. of Canada, Ltd., Toronto

Piston Rings *Piston Expanders* *Valv-Rings*

HASTINGS

STEEL-VENT PISTON RINGS

U. S. Patent Nos. 2,168,997, 2,173,409

Stop Oil-Pumping • Check Cylinder Wear

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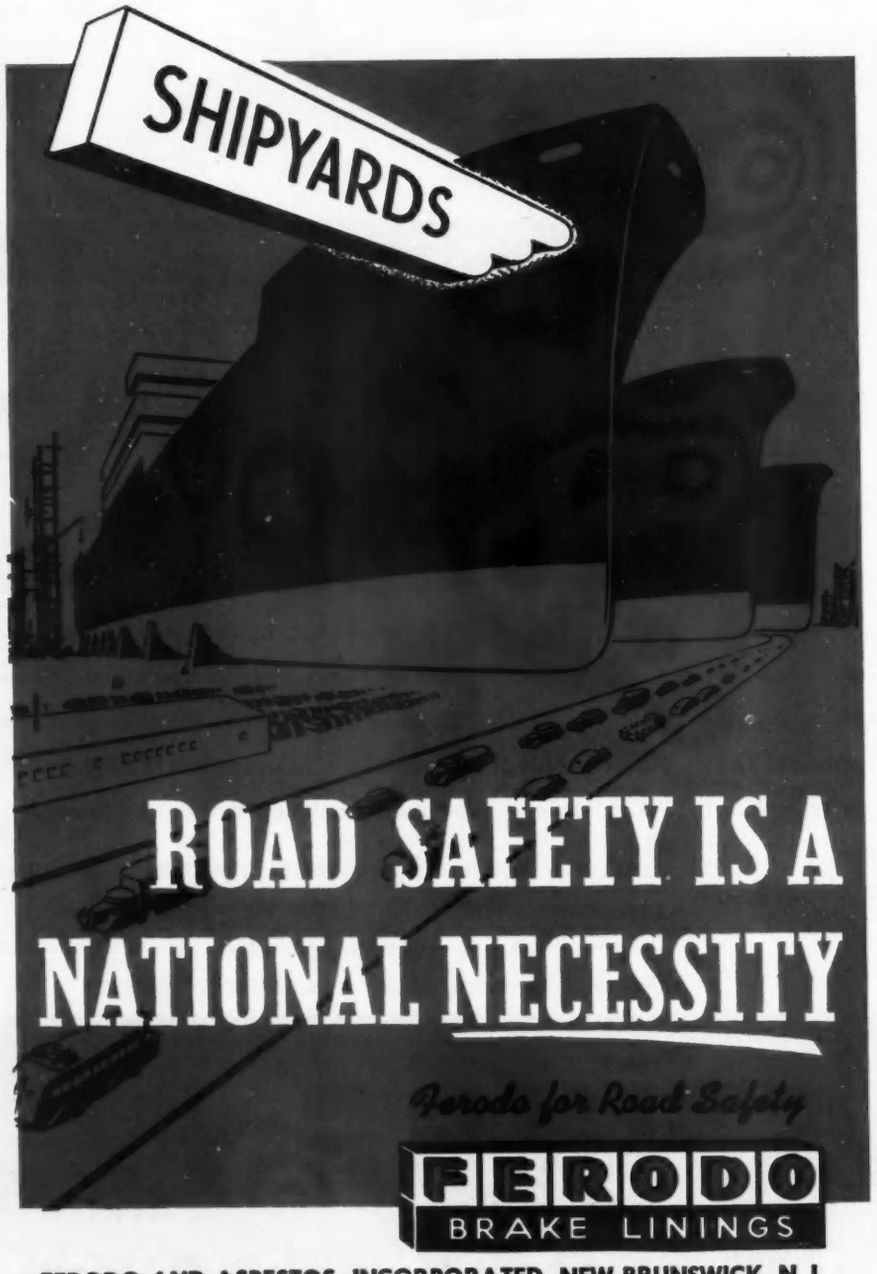
DISTRIBUTOR TEST SPECIFICATIONS

UNIT MODEL NUMBER	Contact Point Opening	Breaker Arm Tension (Oz.)	Centrifugal Advance Eng. deg. & R.P.M. At Start	Centrifugal Advance Eng. deg. & R.P.M. Maximum	Rotation Viewed From Top
DELCO-REMY—Continued					
SM1126	.018-.024	17-21	2@600	16@2200	CCW
1110001	.018-.024	17-21	2@400	22@2400	CW
1110002	.018-.024	.....	3@500	20@2000	CCW
1110003	.018-.024	.....	.....	.....	CW
1110007	.018-.024	.....	2@700	26@2100	CW
1110008	.018-.024	20	1¼@600	50@3600	CW
1110011	.018-.024	17-23	2@400	24@1800	CW
1110015	.018-.024	17-23	2@400	20@1600	CW
1110016	.018-.024	17-21	2@400	22@2400	CCW
1110018	.018-.024	.....	1.7@600	50@3600	CW
1110019	.018-.024	.....	1@400	27@1800	CW
1110021	.018-.024	25	2@700	14@2600	CCW
1110022	.018-.024	17-21	2@600	27@3200	CCW
1110025	.018-.024	.....	2@400	18@2200	CCW
1110027	.018-.024	17-21	2@400	22@2400	CW
1110030	.018-.024	.....	2@600	26@2300	CW
1110031	.018-.024	17-21	3@500	34@3200	CW
1110032	.018-.024	17-21	3@500	34@3200	CW
1110033	.018-.024	17-21	2@400	22@2400	CW
1110034	.018-.024	.....	2@600	22@2200	CCW
1110039	.018-.024	.....	2@600	20@2600	CW
1110041	.018-.024	17-21	3@600	17@2200	CW
1110043	.018-.024	17-21	3@600	17@2200	CW
1110044	.018-.024	.....	2@500	38@2400	CW
1110045	.018-.024	.....	1.7@600	50@3600	CW
1110046	.018-.024	17-23	2@400	18@2200	CCW
1110049	.018-.024	.....	2@500	38@2400	CW
1110052	.018-.024	17-21	4@800	37@3100	CW
1110053	.018-.024	17-21	2@600	16@2200	CW
1110055	.018-.024	.....	2@600	22@2200	CCW
1110056	.018-.024	.....	2@600	20@2350	CCW
1110057	.018-.024	.....	2@600	22@2200	CCW
1110059	.018-.024	17-21	3@500	34@3200	CW
1110061	.018-.024	17-21	4@800	37@3100	CW
1110062	.018-.024	17-21	4@800	37@3100	CW
1110064	.018-.024	17-21	2@400	22@2400	CW
1110068	.018-.024	17-21	3@500	34@3200	CW
1110070	.018-.024	17-23	2@400	20@1600	CW
1110071	.018-.024	17-23	2@600	20@2600	CW
1110074	.018-.024	17-23	2@400	20@1600	CW
1110075	.018-.024	17-23	2@400	32@3400	CW
1110079	.018-.024	17-23	3@500	34@3200	CW
1110082	.018-.024	17-23	2@600	20@2600	CW
1110083	.018-.024	17-23	2@600	20@2600	CW
1110086	.018-.024	17-23	2@600	20@2600	CW
1110088	.018-.024	17-23	2@700	24@2600	CW
1110089	.018-.024	17-23	2@500	29@2800	CW
1110090	.018-.024	17-23	1@600	39@3450	CW
1110094	.018-.024	17-23	2@600	18@2600	CCW
1110095	.018-.024	17-23	2@600	18@2600	CCW
1110098	.018-.024	17-23	2@400	24@1800	CW
1110100	.....	.....	.....	.....	CW
1110125	.018-.024	17-23	2@700	24@2600	CW
1110126	.018-.024	17-23	2@400	32@3400	CW
1110133	.018-.024	17-23	2@400	20@1600	CW
1110135	.018-.024	17-23	2@400	32@3400	CW
1110136	.015-.021	17-23	1@600	39½@3450	CW
1110137	.018-.024	17-23	2@400	32@2000	CW
1110204	.018-.024	.....	2@600	22@2200	CCW
1110209	.018-.024	.....	2@600	22@2200	CW
1110402	.018-.024	20	2@600	23@2400	CCW
1111201	.018-.024	17-23	2@500	20@2200	CW
1111204	.018-.024	17-21	2@400	24@1400	CCW
1111205	.018-.024	.....	2@400	14@1850	CCW
1110509	.018-.024	17-23	2@600	9@2000	CCW
1110510	.018-.024	17-23	2@600	20@2400	CCW
1110511	.018-.024	17-23	3@600	28@3000	CCW
1111204	.018-.024	17-23	2@400	24@1400	CCW
1111403	.018-.024	17-23	1@600	20@2000	CW
1111404	.018-.024	17-23	2@400	24@1800	CW
1111405	.018-.024	17-23	1@600	20@2000	CW



FERODO AND ASBESTOS, INCORPORATED, NEW BRUNSWICK, N.J.

STARTERS

ELECTRICAL TEST SPECIFICATIONS

UNIT MODEL NUMBER	LOCK TEST Volts	LOCK TEST Amps	LOCK TEST Torque	NO LOAD Volts	NO LOAD Amps	NO LOAD RPM
AUTO-LITE						
MAB-4028	3.0	582	15.8	5.5	60	3700
MAB-4030	3.0	582	15.8	5.5	60	3700
MAB-4037	3.0	582	15.8	5.5	60	3700
MAB-4071	3.0	582	15.8	5.5	60	3700
MAB-4078	3.0	582	15.8	5.5	60	3700
MAB-4082	3.0	582	15.8	5.5	60	3700
MAB-4085	3.0	582	15.8	5.5	60	3700
MAB-4091	3.0	582	15.8	5.5	60	3700
MAB-4093	3.0	582	15.8	5.5	60	3700
MAB-4094	3.0	582	15.8	5.5	60	3700
MAB-4098	3.0	582	15.8	5.5	60	3700
MAJ-4011	3.0	550	12.0	5.5	67	4100
MAJ-4037	3.0	550	12.0	5.5	67	4100
MAJ-4038	3.0	550	12.0	5.5	67	4100
MAJ-4040	3.0	550	12.0	5.5	67	4100
MAJ-4042	3.0	550	12.0	5.5	67	4100
MAK-4001	3.0	380	4.5	5.5	70	5000
MAS-4003	6.0	440	20.0	11.0	35	4100
MAS-4008	6.0	440	20.0	11.0	35	4100
MAS-4009	6.0	440	20.0	11.0	35	4100
MAS-4011	6.0	440	20.0	11.0	35	4100
MAU-4005	6.0	540	17.3	11.0	65	4800
MAU-4006	6.0	540	17.3	11.0	65	4800
MAU-4009	6.0	540	17.3	11.0	65	4800
MAU-4011	6.0	535	35.0	11.0	65	2500
MAU-4012	6.0	540	17.3	11.0	65	4800

CONTINUED ON PAGE 100

"Most Valuable Piece of Equipment in Our Entire Outfit!"

Says George O. White of Chattanooga

"Lubrication Delays Eliminated . . . Track Roller And Other Bearing Expense Reduced by 25%, Since We Got Our ALEMITE PORTABLE SERVICE STATION"

WRITES George O. White, well known Chattanooga contractor, "Our Alemite Portable Service Station was purchased to *eliminate lubrication delays*—save operating time—and give us *more efficient lubrication,* particularly of our Caterpillar tractors and heavy earth-moving equipment.

"The Alemite Portable Service Station has accomplished this. Not only has operating time been saved, but our maintenance expense on track roller and other bearings has been reduced by 25%. We have also reduced our lubricant consumption by 10%, as there is little or no waste when pumping from the original container to the bearings. In our opinion, this lubricating set-up is the most valuable piece of equipment in our entire outfit!"

Another Product of STEWART WARNER

Complete information on the Alemite Portable Service Station—how it often pays for itself before the end of a single project—is contained in a new catalog just off the press. Write for FREE copy today!

MODEL 6700 BARREL PUMPS
. . . comprise a complete range of heavy-duty pneumatic pumps—available for high, medium, or low pressures. Handle heavy greases direct from drums.
MODEL 7710 MOTOR OIL DISPENSER
. . . ideal for filling large crank cases, housings and large bearings. Pumps oil direct from 55-gallon drum, keeping oil clean and saving valuable time. Uses 100 pounds air pressure.
MODEL 6679 LEVER GUN
. . . Handles all grades of lubricant—even heavy fibrous or water pump greases. Heavy duty construction; spring primed; extra long handle for easy operation. Delivers 1/10 oz. of lubricant per stroke at pressures up to 5,000 pounds.

ALEMITE HELPS THE WORLD GO 'ROUND

ALEMITE

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Industrial LUBRICATION

Ask Anyone in Industry! *1876 Diversey Parkway, Chicago, Illinois • Belleville, Ontario*

CONTINUED FROM PAGE 98

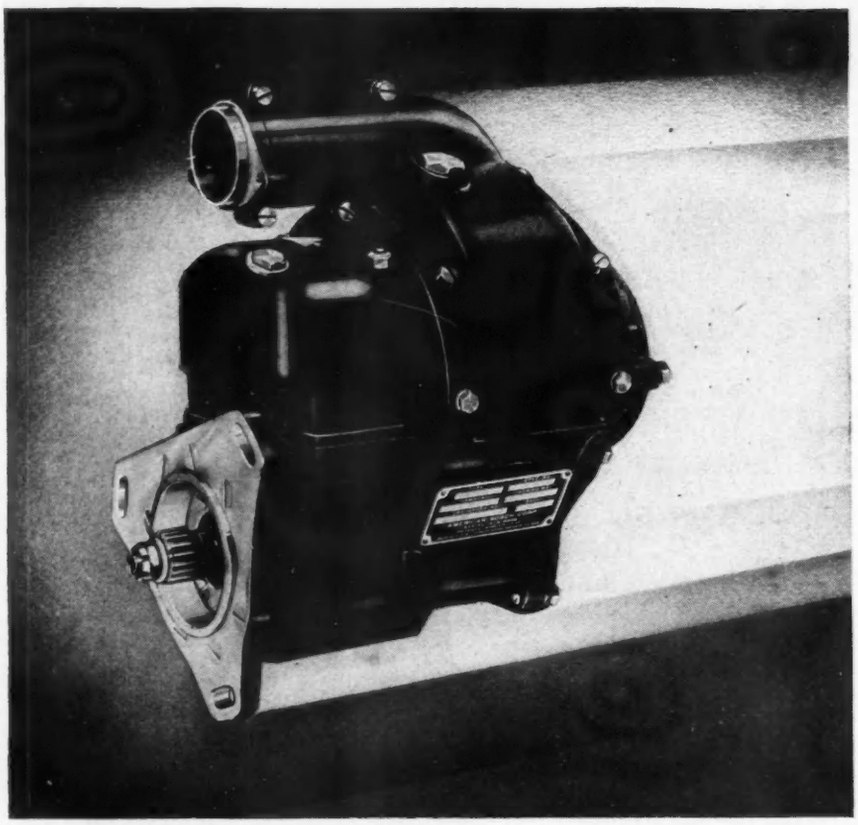
STARTER TEST SPECIFICATIONS

UNIT MODEL NUMBER	LOCK TEST			NO LOAD		
	Volts	Amps	Torque	Volts	Amps	RPM
AUTO-LITE—Continued						
MAU-4013	6.0	540	17.3	11.0	65	4800
MAU-4014	6.0	540	17.3	11.0	65	4800
MAU-4016	6.0	540	17.3	11.0	65	4800
MAU-4022	6.0	540	17.3	11.0	65	4800
MAW-4001	3.0	505	11.5	5.5	65	4900
MAW-4005	3.0	505	11.5	5.5	65	4900
MAW-4013	3.0	505	11.5	5.5	65	4900
MAW-4013A	3.0	505	11.5	5.5	65	4900
MAW-4013B	3.0	505	11.5	5.5	65	4900
MAW-4015	3.0	505	11.5	5.5	65	4900
MAW-4020	3.0	505	11.5	5.5	65	4900
MAW-4028	3.0	505	11.5	5.5	65	4900
MAW-4029	3.0	505	11.5	5.5	65	4900
MAX-4007	3.0	640	16.5	5.5	65	5300
MAX-4009	3.0	652	33.5	5.5	77	2700
MAX-4017	3.0	610	21.0	5.5	70	3900
MAX-4018	3.0	640	16.5	5.5	65	5300
MAX-4028	3.0	640	16.5	5.5	65	5300
MAX-4031	3.0	640	16.5	5.5	65	5300
MAX-4031A	3.0	640	16.5	5.5	65	5300
MAX-4031B	3.0	640	16.5	5.5	65	5300
MAX-4032	3.0	640	16.5	5.5	65	5300
MAX-4033	3.0	640	16.5	5.5	65	5300
MAX-4034	3.0	652	33.5	5.5	77	2700
MAX-4035	3.0	652	33.5	5.5	77	2700
MAX-4039	3.0	640	16.5	5.5	65	5300
MAX-4048	3.0	640	16.5	5.5	65	5300
MAX-4053	3.0	640	16.5	5.5	65	5300
MAX-4054	3.0	640	16.5	5.5	65	5300
MAY-4114A	6.0	285	13.2	11.0	30	5300
MAY-4114B	6.0	285	13.2	11.0	30	5300
MAY-4132	6.0	285	13.2	11.0	30	5300
MBA-4001	3.0	505	11.0	5.5	65	4900
MBD-4003	6.0	590	35.0	20.0	65	5300
MBD-4005	6.0	590	35.0	20.0	65	5300
ML-4151	3.0	555	18.0	5.5	50	2980
ML-4154	3.0	555	18.0	5.5	50	2980
ML-4162	3.0	555	18.0	5.5	50	2980
ML-4163	3.0	555	18.0	5.5	50	2980
ML-4173	3.0	555	18.0	5.5	50	2980
ML-4179	3.0	555	18.0	5.5	50	2980
ML-4180	3.0	555	18.0	5.5	50	2980
ML-4186	3.0	555	18.0	5.5	50	2980
ML-4189	3.0	555	18.0	5.5	50	2980
ML-4191	3.0	555	18.0	5.5	50	2980
ML-4202	3.0	555	18.0	5.5	50	2980
ML-4209	3.0	555	18.0	5.5	50	2980
MR-4104	3.0	525	30.0	5.5	40	2800
MR-4108	3.0	525	30.0	11.0	50	4300
MR-4111	3.0	525	30.0	11.0	50	4300
MR-4115	3.0	525	30.0	5.5	40	2800
MR-4119	3.0	525	30.0	11.0	50	4300
MZ-4049	3.0	420	7.8	5.5	70	4300
MZ-4059	3.0	420	7.8	5.5	70	4300
MZ-4059A	3.0	420	7.8	5.5	70	4300
MZ-4064	3.0	420	7.8	5.5	70	4300
MZ-4065	3.0	420	7.8	5.5	70	4300
MZ-4069	3.0	420	7.8	5.5	70	4300
MZ-4082	3.0	420	7.8	5.5	70	4300
MZ-4083	3.0	420	7.8	5.5	70	4300
MZ-4090	3.0	420	7.8	5.5	70	4300
MZ-4093	3.0	420	7.8	5.5	70	4300
MZ-4099	3.0	420	7.8	5.5	70	4300
MZ-4100	3.0	420	7.8	5.5	70	4300
MZ-4104	3.0	420	7.8	5.5	70	4300
MZ-4106	3.0	420	7.8	5.5	70	4300
MZ-4113	3.0	420	7.8	5.5	70	4300

DELCO-REMY

371	3.0	500	19	5.0	70	3000
412	5.3	670	32	11.2	80	4500
413	3.0	500	19	5.0	70	3000
414	5.3	670	32	11.2	80	4500
477	4.8	725	44	12.0	65	4500
488	3.5	500	45	8.0	75	2000
493	4.5	500	30	8.0	60	2000
494	3.5	500	45	8.0	75	2000
541	3.0	600	35	5.7	70	2200
548	5.0	700	51	11.2	75	2400
575	4.8	725	44	12.0	65	4500
578	4.8	725	44	12.0	65	4500
579	4.8	725	44	12.0	65	4500
586	4.8	725	44	12.0	65	4500
587	4.8	725	44	12.0	65	4500
590	5.3	670	32	11.2	80	4500
599	4.8	725	44	12.0	65	4500
640	3.0	500	19	5.0	70	3000
642	5.3	670	32	11.2	80	4500
644	3.5	500	45	8.0	75	2000
648	3.0	500	25	22.0	85	6000
650	3.0	500	25	22.0	85	6000
653	3.0	500	25	22.0	85	6000
655	3.0	500	19	5.0	70	3000
656	3.0	600	24	12.0	100	6000
659	3.0	500	25	22.0	85	6000
660	3.0	600	24	12.0	100	6000
661	5.3	670	32	11.2	80	4500
662	3.0	500	25	22.0	85	6000
663	29.5	100	19	32.0	13	1600
668	3.0	500	25	22.0	85	6000
700	3.0	500	19	5.0	70	3000
704	3.0	600	35	5.7	70	2200
707	3.0	500	25	22.0	85	6000
708	3.0	500	25	22.0	85	6000
709	3.0	600	24	12.0	100	6000
711	3.0	500	25	22.0	85	6000
712E	3.8	450	11	5.0	70	4500
713	5.0	700	51	11.2	75	2400
714	3.0	500	19	5.0	70	3000
714B	3.4	525	12	5.0	65	5000
714G	3.4	525	12	5.0	65	5000
718D	3.1	570	15	5.0	65	6000
718F	3.1	570	15	5.0	65	6000
718R	3.1	570	15	5.0	65	6000
718S	7.5	450	15	11.3	65	6000
719	3.0	600	24	12.0	100	6000
720QX	3.1	570	15	5.0	65	6000
720T	3.1	570	15	5.0	65	6000
720V	3.1	570	15	5.0	65	6000
720X	3.1	570	15	5.0	65	6000
721E	6.5	490	28	10.0	70	3000
721G	6.5	490	28	10.0	70	3000
721K	3.0	600	22	5.0	70	3500
724X	3.0	600	22	5.0	70	3500
724Y	6.5	490	28	10.0	70	3000

SKY HIGH



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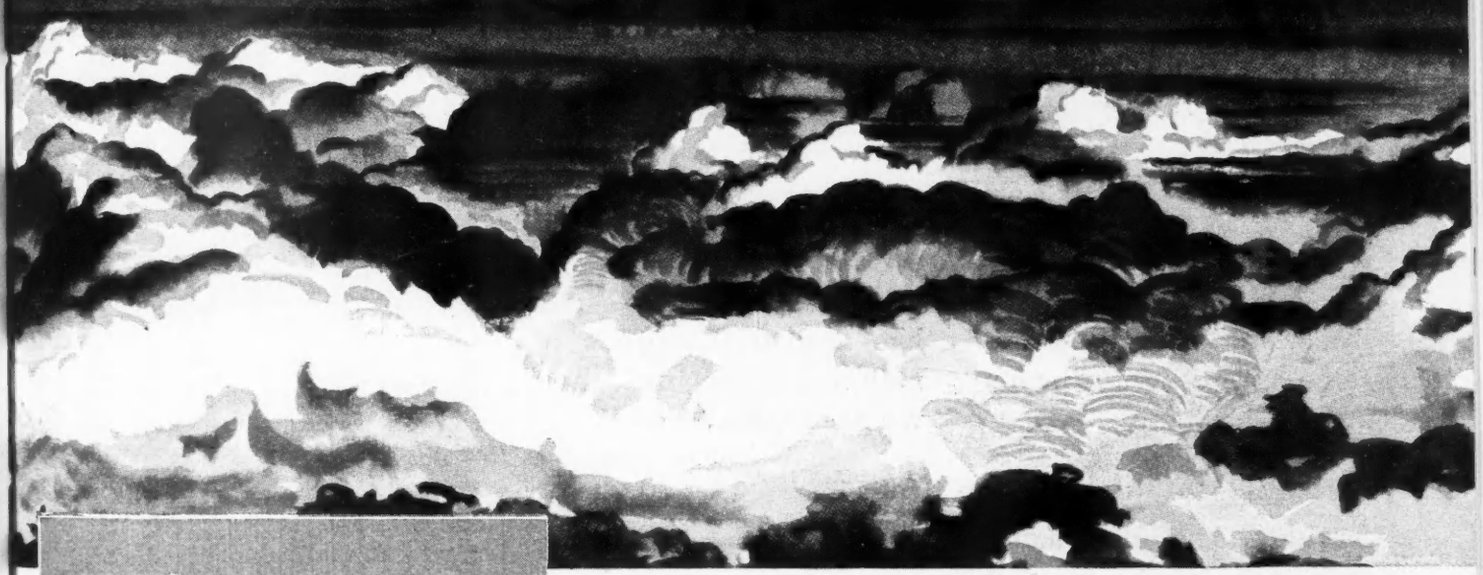
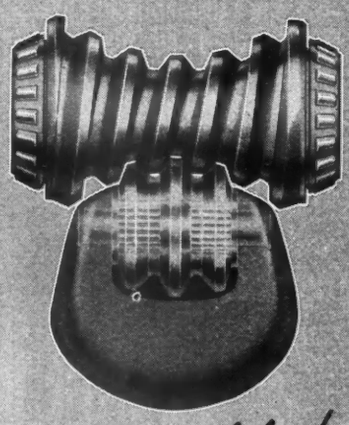
AMERICAN BOSCH MAGNETO

CONTINUED ON PAGE 102

GEMMER STEERING GEARS

THE "Ceiling" IN DESIGN AND QUALITY CONSTRUCTION





The Symbol of Steering Excellence

THE GREAT military plane soars high into the blue—to the "ceiling"—the highest attainable.

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Gemmer Triple Roller Tooth Steering Gears have these all-important and desirable steering factors: **EFFICIENCY**—Highest available—provides easy steering always—plenty of power for parking. **STABILITY**—Steering is firm, response positive, with absence of rubbery feeling and wander. **SAFETY**—Abundant safety factor—low internal stresses. **DURABILITY**—Endurance for the life of the vehicle. **CONVENIENCE**—Compact design for easy installation and weight saving without sacrifice of steering arm angularity or overall capacity.

GEMMER MANUFACTURING COMPANY • 6400 Mt. Elliott Ave., Detroit, Mich.

CONTINUED FROM PAGE 100

STARTER TEST SPECIFICATIONS

UNIT MODEL NUMBER	LOCK TEST			NO LOAD		
	Volts	Amps	Torque	Volts	Amps	RPM
DELCO-REMY—Continued						
724Z	3.0	600	22	5.0	70	3500
725D	3.0	600	16	5.0	60	6000
725P	6.7	530	16	10.0	70	7000
727	3.5	500	45	8.0	75	2000
728	3.0	500	19	5.0	70	3000
729L	3.0	600	16	5.0	65	5500
730	3.0	600	24	12.0	100	6000
733	3.0	600	24	12.0	100	6000
734K	3.4	525	12	5.0	65	5000
734T	3.4	525	12	5.0	65	5000
734X	3.4	525	12	5.0	65	5000
734Y	3.3	525	12	5.0	65	5000
734Z	3.3	525	12	5.0	65	5000
735	3.0	500	25	22.0	85	6000
721L	3.0	600	22	5.0	70	3500
721M	3.0	600	22	5.0	70	3500
721N	6.5	490	28	10.0	70	3000
721P	6.5	490	28	10.0	70	3000
722L	3.0	600	22	5.0	70	3500
722N	6.5	490	28	10.0	70	3000
722T	3.0	600	22	5.0	70	3500
722W	3.0	600	22	5.0	70	3500
722Y	6.5	490	28	10.0	70	3000
724	5.3	670	32	11.2	80	4500
724C	3.0	600	22	5.0	70	3500
724D	3.0	600	22	5.0	70	3500
724L	3.0	600	22	5.0	70	3500
724Q	3.0	600	22	5.0	70	3500
724R	3.0	600	22	5.0	70	3500
724U	3.0	600	22	5.0	70	3500
736	3.0	600	24	12.0	100	6000
736C	3.1	570	15	5.0	65	6000
736G	3.1	570	15	5.0	65	6000
736N	7.5	450	15	11.3	65	6000
736U	7.5	450	15	11.3	65	6000
736V	3.1	570	15	5.0	65	6000
736Y	3.1	570	15	5.0	65	6000
736Z	7.5	450	15	11.3	65	6000
737	4.8	725	44	12.0	65	4500
737B	3.1	570	15	5.0	65	6000
737D	3.1	570	15	5.0	65	6000
737E	3.1	570	15	5.0	65	6000
737F	7.5	450	15	11.3	65	6000
737G	3.1	570	15	5.0	65	6000
737H	7.5	450	15	11.3	65	6000
737P	7.5	450	15	11.3	65	6000
737R	3.1	570	15	5.0	65	6000
737T	3.1	570	15	5.0	65	6000
737W	7.5	450	15	11.3	65	6000
737Y	3.1	570	15	5.0	65	6000
737Z	3.1	570	15	5.0	65	6000
738	3.0	500	25	22.0	85	6000
738C	3.4	525	12	5.0	65	5000
738G	3.4	525	12	5.0	65	5000
738N	3.4	525	12	5.0	65	5000
739	3.0	500	25	22.0	85	6000
739A	3.4	525	12	5.0	65	5000
739E	3.3	525	12	5.0	65	5000
739H	3.4	525	12	5.0	65	5000
740	3.0	500	25	22.0	85	6000
740K	3.1	570	15	5.0	65	6000
740L	7.5	450	15	11.3	65	6000
740M	3.1	570	15	5.0	65	6000
740N	7.5	450	15	11.3	65	6000
741	3.0	500	25	22.0	85	6000
742	3.0	500	25	22.0	85	6000
743	3.0	600	24	12.0	100	6000
743A	7.5	450	15	11.3	65	6000
751	3.0	500	25	22.0	85	6000
752	3.0	600	24	12.0	100	6000
753	4.8	725	44	12.0	65	4500
754	3.0	600	24	12.0	100	6000
755	4.8	725	44	12.0	65	4500
756	5.0	700	55	11.2	75	2250
759	4.8	725	44	12.0	65	4500
762	3.0	500	25	22.0	85	6000
763	3.0	500	25	22.0	85	6000
767	3.0	600	24	12.0	100	6000
768	3.0	500	25	22.0	85	6000
769	3.5	500	45	8.0	75	2000
772	3.0	500	25	22.0	85	6000
773	3.0	600	24	12.0	100	6000
774	3.0	600	35	5.7	70	2200
777	3.0	500	25	22.0	85	6000
780	3.0	600	24	12.0	100	6000
781	5.3	670	32	11.2	80	4500
786	3.0	500	25	22.0	85	6000
790	5.0	700	51	11.2	75	2400
793	4.8	725	44	12.0	65	4500
796	3.0	500	25	22.0	85	6000
805	4.3	800	60	23.3	90	6800
806	4.3	800	60	23.3	90	6800
807	4.3	800	60	23.3	90	6800
808	4.3	800	60	23.3	90	6800
809	4.3	800	60	23.3	90	6800
813	4.3	800	60	23.3	90	6800
816	4.3	800	60	23.3	90	6800
833	4.3	800	60	23.3	90	6800
SM1219	5.3	670	32	11.2	80	4500
SM1307	5.3	670	32	11.2	80	4500
SM1410	3.0	600	15	5.0	65	5500
SM1640	7.5	450	15	11.3	65	6000
SM1646	6.5	490	28	10.0	70	3000
SM1664	4.8	725	44	12.0	65	4500
SM1750	3.0	500	25	22.0	85	6000
SM1751	3.0	500	25	22.0	85	6000
SM1768	3.0	500	25	22.0	85	6000
SM1937	7.5	450	15	11.3	65	6000
1107001	3.3	525	12	5.0	65	5000
1107003	3.3	525	12	5.0	65	5000
1107006	3.3	525	12	5.0	65	5000
1107009	3.3	525	12	5.0	65	5000
1107010	3.3	525	12	5.0	65	5000
1107012	3.3	525	12	5.0	65	5000
1107014	3.4	525	12	5.0	65	5000
1107015	3.4	525	12	5.0	65	5000
1107016	3.4	525	12	5.0	65	5000
1107033	3.4	525	12	5.0	65	5000
1107041	3.4	525	12	5.0	65	5000
1107052	3.4	525	12	5.0	65	5000
1107054	3.4	525	12	5.0	65	5000
1107055	3.4	525	12	5.0	65	5000
1107403	3.1	570	15	5.0	65	6000
1107404	3.1	570	15	5.0	65	6000
1107407	3.1	570	15	5.0	65	6000
1107408	3.1	570	15	5.0	65	6000
1107410	3.1	570	15	5.0	65	6000
1107413	3.1	570	15	5.0	65	6000

A Wartime Message to

SERVIS RECORDER CUSTOMERS

You might be interested to know that this same Servis Recorder which you use on your trucks, is also used on machinery of all kinds, such as:

CRANES, PUNCH PRESSES, MINE LOCOMOTIVES, STEAM SHOVELS, ORE BRIDGES, WIRE ROPE MACHINES, REVERSING VALVES ON SOAKING PITS, ETC., ETC.

• That means, machinery doing war work! And our Recorder still does the same kind of job, it keeps *machinery* busy!

Bolted Right On

Attached in about the same way as on a *truck*, it "rides on the machine" and makes a daily record of Busy Time, and more important still, IDLE TIME.

Machinery Is Scarce

So is the metal that makes machinery, the labor, the time, etc. But look!... If we can increase the productive time of these machines only 10%, it is just like finding thousands of new machines, just when we need them most!

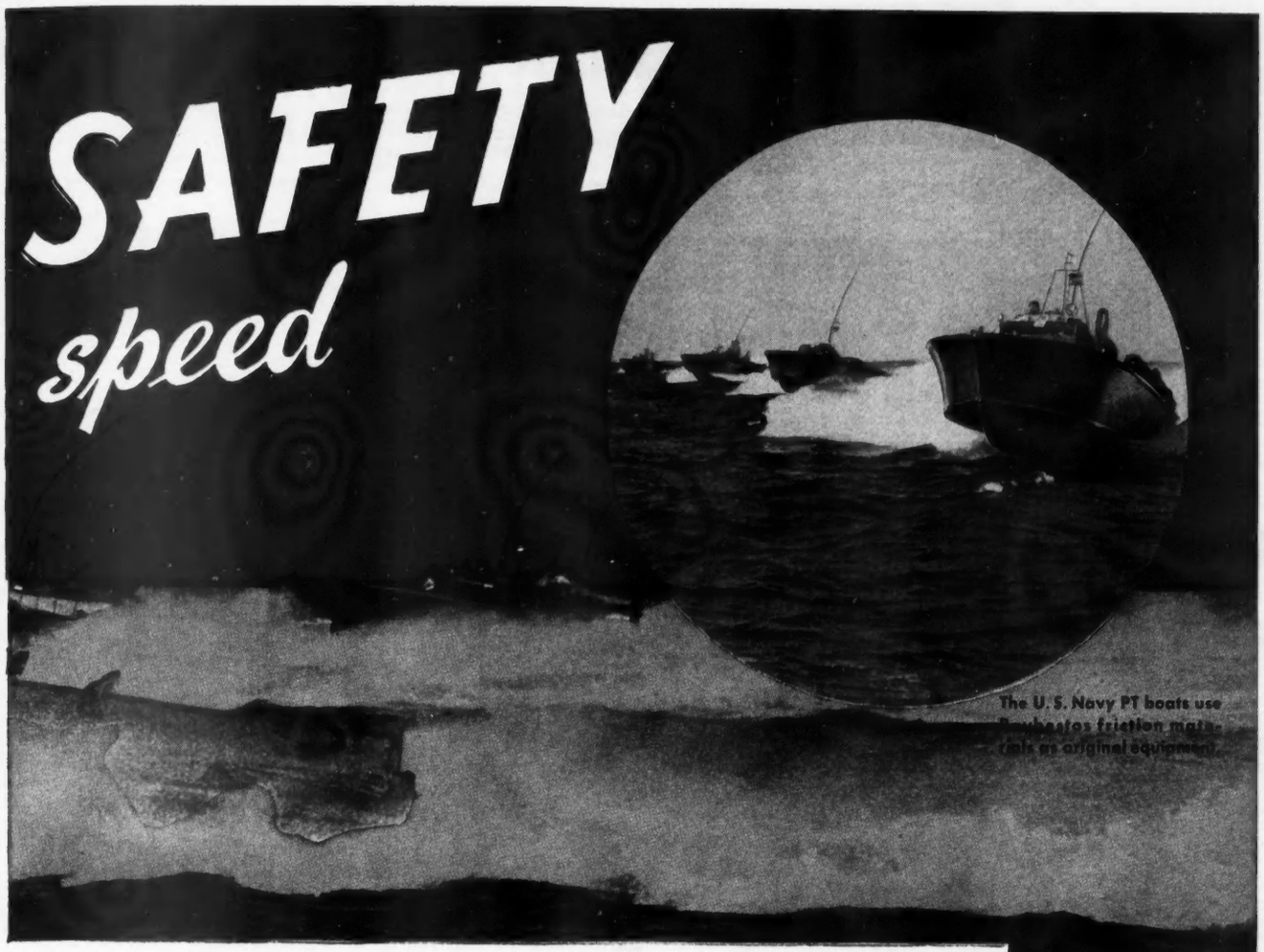
It means:

Creating New Machines Out of Thin Air

We thought you might like to know, that in these days the orders that come in to us, more and more show us that the *Servis Recorder*, your recorder, is doing that kind of war-time job. The Service Recorder Co., 1375 Euclid Ave., Cleveland, O.

The Servis Recorder
Tells Every Move Your Truck Makes

CONTINUED ON PAGE 106



Sleek, deadly, and lightning fast—PT boats of the U. S. Navy.

To take the terrific poundings of their great speed, these mighty atoms of the fleet are built with a margin of safety beyond all maximum calculable needs.

That same vital principle of extra safety is also built into every segment of Raybestos Heavy Duty Brake Lining. It will stop a five ton truck, for example, with a 20 ton load—safely. That's 300% safety in excess of the truck's normal rated capacity. That's stopping power.

More than ever, your trucks need Raybestos margin of safety performance because they're working harder than ever.

It will pay you to specify Raybestos.

THE RAYBESTOS DIVISION *of Raybestos-Manhattan, Inc.,* **BRIDGEPORT, CONN.**

CONTINUED FROM PAGE 102

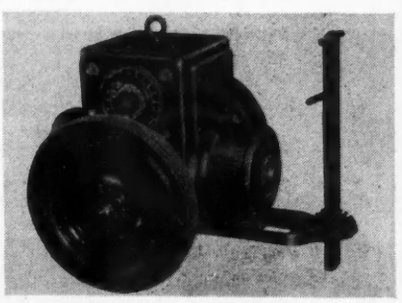
STARTER TEST SPECIFICATIONS

UNIT MODEL NUMBER	LOCK TEST			NO LOAD		
	Volts	Amps	Torque	Volts	Amps	RPM
DELCO-REMY (Cont.)						
1107414	3.1	570	15	5.0	65	6000
1107418	3.1	570	15	5.0	65	6000
1107420	3.1	570	15	5.0	65	6000
1107422	3.1	570	15	5.0	65	6000
1107431	3.1	570	15	5.0	65	6000
1107434	3.1	570	15	5.0	65	6000
1107437	3.1	570	15	5.0	65	6000
1107801	7.5	450	15	11.3	65	6000
1107803	7.5	450	15	11.3	65	6000
1107805	7.5	450	15	11.3	65	6000
1107809	7.5	450	15	11.3	65	6000
1107811	7.5	450	15	11.3	65	6000
1107813	7.5	450	15	11.3	65	6000
1107816	7.5	450	15	11.3	65	6000
1107826	7.5	450	15	11.3	65	6000
1107906	3.0	600	16	5.0	60	6000
1107915	3.0	600	16	5.0	60	6000
1107916	3.0	600	16	5.0	60	6000
1107918	3.0	600	16	5.0	65	5500
1107920	3.0	600	16	5.0	65	5500
1107936	3.0	600	16	5.0	65	5500
1108102	6.7	530	16	10.0	70	7000
1108103	6.7	530	16	10.0	70	7000
1108104	6.7	530	16	10.0	70	7000
1108107	6.7	530	16	10.0	70	7000
1108111	6.7	530	16	10.0	70	7000
1108201	3.0	600	22	5.0	70	3500
1108202	3.0	600	22	5.0	70	3500
1108205	3.0	600	22	5.0	70	3500
1108206	3.0	600	22	5.0	70	3500
1108207	3.0	600	22	5.0	70	3500
1108208	3.0	600	22	5.0	70	3500
1108210	3.0	600	22	5.0	70	3500
1108401	6.5	490	28	10.0	70	3000
1108402	6.5	490	28	10.0	70	3000
1108404	6.5	490	28	10.0	70	3000
1108405	6.5	490	28	10.0	70	3000
1108406	6.5	490	28	10.0	70	3000
1108451	3.0	600	28	5.0	70	2500
1108452	3.0	600	28	5.0	70	2500
1108453	3.0	600	28	5.0	70	2500
1108454	3.0	600	28	5.0	70	2500
1108455	3.0	600	28	5.0	70	2500
1108528	6.7	530	33	10.0	70	2800
1108531	6.7	530	33	10.0	70	2800
1108533	6.7	530	33	10.0	70	2800
1108534	6.7	530	33	10.0	70	2800
1108560	3.4	525	12	5.0	65	5000
1108562	6.7	530	16	10.0	70	7000
1108651	3.0	600	16	5.0	65	5500
1108676	7.5	450	15	11.3	65	6000
1108906	3.0	500	19	5.0	70	3000
1108677	6.7	530	33	10.0	70	2800
1108701	2.3	570	20	11.6	100	5000
1108702	2.3	570	20	11.6	100	5000
1108703	2.3	570	20	11.6	100	5000
1108704	2.3	570	20	11.6	100	5000
1108705	2.3	570	20	11.6	100	5000
1108706	2.3	570	20	11.6	100	5000
1108707	2.3	570	20	11.6	100	5000
1108709	2.3	570	20	11.6	100	5000
1108715	2.3	570	20	11.6	100	5000
1108724	2.3	570	20	11.6	100	5000
1108900	3.0	500	19	5.0	70	3000
1108907	5.3	670	32	11.2	80	4500
1109100	4.8	725	44	12.0	65	4500
1109103	4.8	725	44	12.0	65	4500
1109104	4.8	725	44	12.0	65	4500

FIRST IN Safety Equipment
BOLSER
Lights
Reflectors
Mirrors
Oil Filter
Re-Pak-It Cartridges
Flags
Direction Signals
Fusees
Oil Filters
BOLSER — a full line of quality safety equipment. Latest in design and engineering.
Offers products that are known throughout the industry as the standard of comparison.
NEW NESTED FAIRWAY
THE NATION'S BEST FLARE BUY
An outstanding value — a real quality flare. It's compact — husky — 5" shorter than previous FairWay model. Features patented BOLSER nesting. Each flare has individual extinguishing cap with flag holder. When "nested" DOUBLE SEALS.
Heavy gauge, all steel construction; sturdy steel bracket. Tear drop burner. Streamlined design — greatest eye appeal. Attractively priced. Baked enamel finish. Approved! Built to U. S. Commercial Standard's Specifications.
THE BOLSER CORP. Cedar Falls, Ia.

Two-Wheeled Trailer

A new two-wheeled, lightweight, pneumatic-tired trailer for mounting electric drive welders is now in production at Hobart Brothers Co., Troy, Ohio. Designed for road towing up to 35 m.p.h., this unit will prove very useful for hurry-up trips to different locations for emergency production, maintenance, and repair work. Trailer is so designed that mounting it is accomplished easily by means of three bolts in frame of trailer which register with three holes in the legs of the welding machine. Combination tow bar and



standing support has a hand-operated ratchet for locking support arm in position. Unit is easily moved by hand by virtue of its low, underslung construction, narrow tread, and precision method of balancing. This steel trailer measures 54 in. long, 45 in. wide, 27 in. high (over tires) and has a 13-in. axle center. Tires are 16 x 5.50.

TRUCKS MUST LAST LONGER . . .

Mobilgas
SOCONY-VACUUM

Address Truck-Bus Division,
Socony-Vacuum Oil Co., Inc.,
26 Broadway, New York City

SOCONY-VACUUM OIL CO., INC.,
and Affiliates:
Magnolia Petroleum Co.,
General Petroleum
Corporation of California.

GET THE FACTS ON

SOCONY-VACUUM FLEET LUBRICATION SERVICE

KEEP 'EM ROLLING

REFRIGERATION DATA

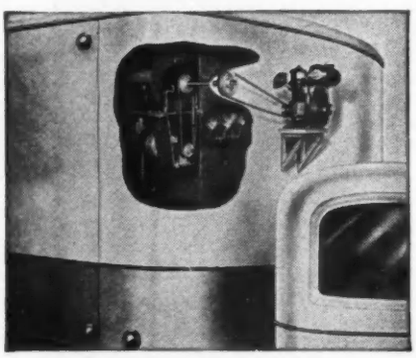
THERMAL CONDUCTIVITY OF INSULATING MATERIALS

Thermal conductivity of various insulating materials per hour per square foot per degree Fahrenheit per inch of thickness

Balsam Wool	.26	Corkboard (7 lb. per cu. ft.)	.27	Dry-Zero	.24
Celotex	.31	Corkboard (10.6 lb. per cu. ft.)	.30	Lata-Balsa	.35
Corkboard (5.4 lb. per cu. ft.)	.25	Corning Wool (1½ lb. per cu. ft.)	.27	Masonite	.33
				Palco Wool	.26
				Rock Cork	.33
				Temlock	.33

D&G OFFERS *BOTH* TYPES OF TRUCK & TRAILER REFRIGERATION

BEANS, berries, milk, etcetera, loaded into the truck while warm, present a far different refrigeration problem than meat or dairy products which have been pre-chilled before loading. Because of this, D & G offer two different units—each one designed *specifically* to do *one* job—to *exactly* fit the needs of one class of commodities.

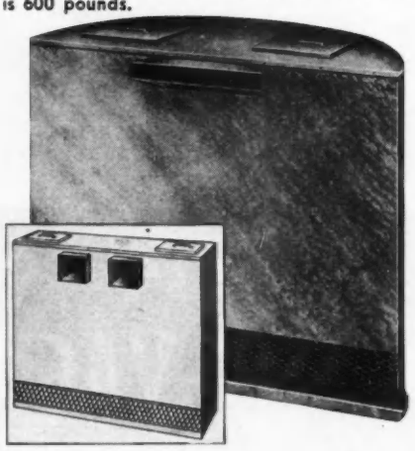


D & G SPRAY TYPE is designed especially for refrigerating FRESH MEAT, DAIRY PRODUCTS AND OTHER PRE-CHILLED COMMODITIES.

Sprays replace the conventional fins or coils so that problems of defrosting or blockage of air passages are completely eliminated. A large, double squirrel cage type of blower assures ample air circulation. Features such as the bronze fitted pump, roller bearings throughout and hot dipped galvanizing after fabrication contribute to the unit's long life and trouble free performance. Ice capacity is 600 pounds.

D & G PRODUCE TYPE is designed especially for refrigerating FRESH FRUIT AND VEGETABLES, MILK AND OTHER COMMODITIES LOADED INTO THE TRUCK WHILE WARM.

Two large ice hatches permit quick, easy filling, and ice capacity is 2,000 pounds. The 3 H.P. standard make gasoline engine operates an oversize, heavy duty blower type fan, and ball bearings are used throughout. Unit housing is made of Armco Iron, hot dipped galvanized after fabrication, and includes a drip pan as an integral part. Top of unit is removable.



Write for literature on the D & G Type suited to YOUR NEEDS

DROMGOLD & GLENN

1419 McCORMICK BLDG. · CHICAGO

Temperatures Recommended for Transportation and Retail Storage

UNFROZEN

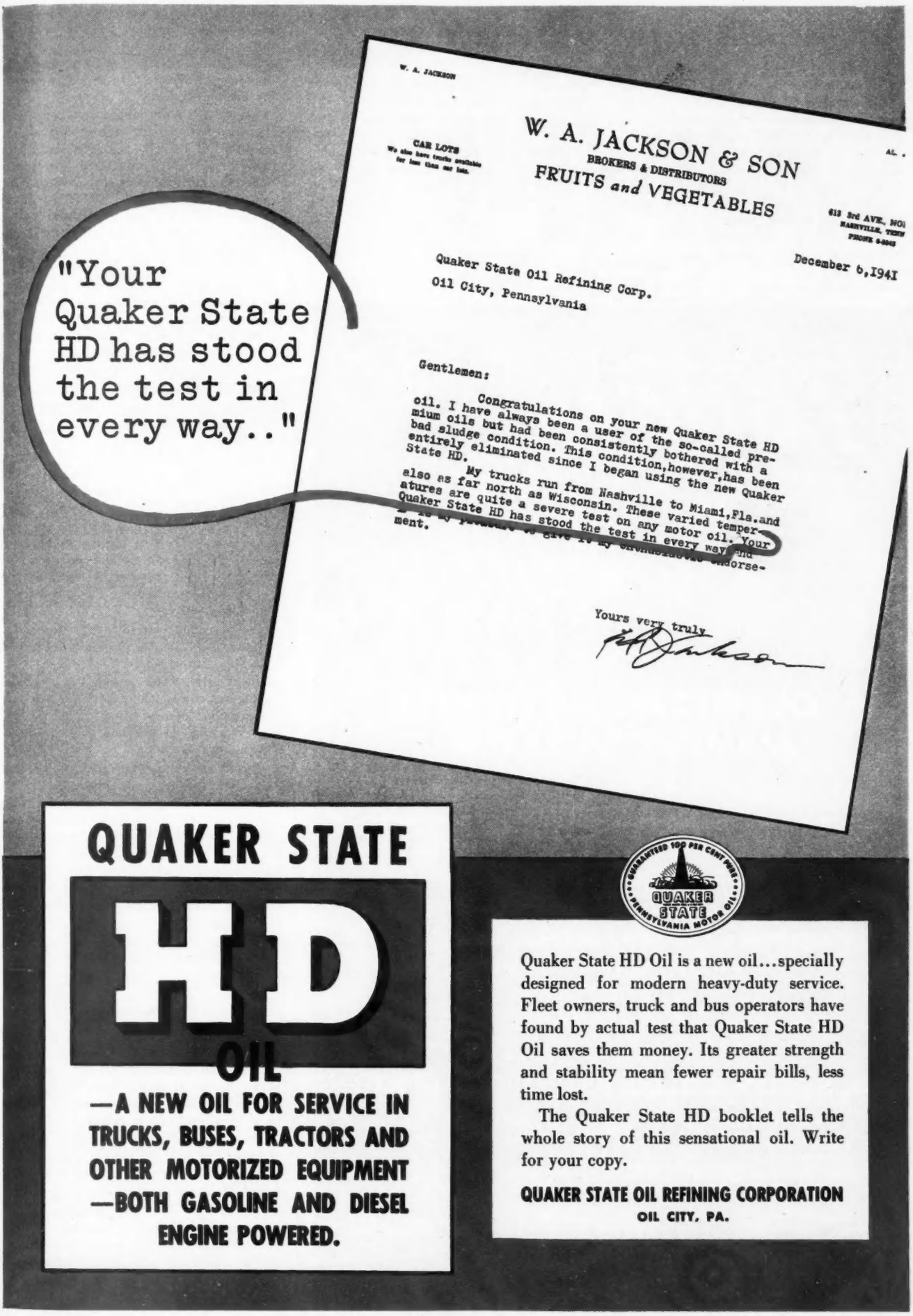
VEGETABLES		FRUITS		MEATS AND FISH	
Asparagus	33-34	Apples	32-36	Bacon	30-35
Beans (green)	33-34	Apricots	35-40	Beef (fresh)	32-40
Beets	32-40	Bananas	55	Eggs	33-36
Brocoli	32-34	Blackberries	36-40	Fish (fresh)	32-40
Cabbage	32-36	Cantaloupes	35-40	Lamb	32-36
Carrots	33-36	Cherries	36-40	Mutton	32-36
Cauliflower	32-34	Cranberries	33-36	Oysters (shell)	30-35
Celery	32-34	Gooseberries	35-40	Pork (fresh)	30-34
Corn (green)	36-38	Grapefruit	32-36	Poultry	28-30
Cucumbers	36-40	Grapes	32-36	Veal	35-40
Lettuce	32-40	Lemons	40-45		
Onions	32-36	Oranges	35-45	DAIRY PRODUCTS	
Peas (green)	32-36	Peaches	35-40	Butter	20-35
Potatoes	35-40	Pears	32-34	Cheese	35-40
Potatoes (sweet)	50-55	Plums	32-36	Milk (sweet)	32-36
Radishes	32-36	Raspberries	35-40	Milk (butter)	32-40
Squash	33-36	Strawberries	35-40		
Tomatoes	35-40			FROZEN FOODS	
				Eggs	10-15
				Fish	10-20
				Fruits in syrup	10-20
				Ice Cream	5-10
				Meats	10-20
				Vegetables	5-10

Courtesy American Society Refrigerating Engineers

Desirable Wall Conductivities for Perishables

(Wall conductivities generally desirable for the transportation of various types of perishables.)

Type of Truck	B.T.U. per hour per degree F. per square foot
Bakery, candy and bread trucks	.60
Trucks for bulk and smoked meats	.15 to .30
Trucks for sausage and fresh cut meats	.10 to .20
Ice cream, quick-frozen food trucks	.06 to .05
Trucks for solid carbon-dioxide transport	.03 to .06


"Your Quaker State HD has stood the test in every way.."
W. A. JACKSON
W. A. JACKSON & SON
BROKERS & DISTRIBUTORS
FRUITS and VEGETABLES
CAR LOTS
December 6,1941
Quaker State Oil Refining Corp.
Oil City, Pennsylvania
Gentlemen:
Congratulations on your new Quaker State HD oil. I have always been a user of the so-called premium oils but had been consistently bothered with a bad sludge condition. This condition,however,has been entirely eliminated since I began using the new Quaker State HD.
My trucks run from Nashville to Miami,Fla.and also as far north as Wisconsin. These varied temperatures are quite a severe test on any motor oil. Your Quaker State HD has stood the test in every way and
ment.
Yours very truly

QUAKER STATE HD OIL

—A NEW OIL FOR SERVICE IN TRUCKS, BUSES, TRACTORS AND OTHER MOTORIZED EQUIPMENT —BOTH GASOLINE AND DIESEL ENGINE POWERED.

GUARANTEED 100 PER CENT PURE QUAKER STATE PENNSYLVANIA MOTOR OIL

Quaker State HD Oil is a new oil...specially designed for modern heavy-duty service. Fleet owners, truck and bus operators have found by actual test that Quaker State HD Oil saves them money. Its greater strength and stability mean fewer repair bills, less time lost.

The Quaker State HD booklet tells the whole story of this sensational oil. Write for your copy.

QUAKER STATE OIL REFINING CORPORATION
OIL CITY, PA.

COOLING SYSTEM MAINTENANCE TIPS

OF major importance today is the proper maintenance of the engine cooling system. A clogged, inefficient cooling system will waste gas and overheat the engine. Lubrication may fail due to high temperatures. Oil sludge, varnishes and lacquers form, causing piston ring and valve sticking, irregular engine operation and excessive wear of moving parts.

From this line-up of facts the importance of engine cooling must be emphasized, for today we are faced with the necessity of conserving materials.

If the cooling system check-up is part of your preventive maintenance program, the following hints can be used as a guide for a more complete check-up. If you do not have a regular cooling system check-up in your maintenance program, it would be well to use these hints as a basis for a periodic routine check.

Drain and flush the radiator cooling system at regular intervals. There are available good cleaning compounds and solutions for this purpose, but it is advisable to follow the manufacturer's recommendations on the type of solution to be used in the cooling system.

Check all hose connections and hose clamps. Pay particular attention to the condition of the clamp and screw. If the threads are worn the clamp will loosen under operating pressure of the water. When replacing hose, use a thin coating of cement at the joint and be careful not to pinch the hose when installing the clamp.

Check hose for sponginess. Sponginess can be detected by squeezing the hose when the water is not circulating. Deterioration of the inside lining restricts circulation, particles break off and lodge in the radiator core and other parts of the system.

Check the core plugs, engine drain cocks, water jacket cover plates, cylinder head and other water joints in the engine. In many instances these leak only under operating pressure, so look for tell-tale rust lines.

Check the radiator mountings. Many radiator leaks are due to strains and shocks from front-end vibration. If the radiator has a spring bolt mounting, check for broken springs and stripped threads. If mounted on rubber, be sure rubber pads are in good condition and not worn or spread-out. Rust, grease, and road dirt collect at this point and the life of rubber is materially shortened.

Check radiator carefully before cleaning. Tell-tale white or rust stains are evidences of a leak in the core.

Check the water pump for leakage. Tightening the packing nut or replacing the packing does not always stop the leaking. Examine the shaft or bearing for abnormal wear.

Check the thermostat at least twice a year. The moving parts of the thermostat are subject to wear, therefore the thermostat should be removed and tested. Hang the thermostat by its frame in water heated to a few degrees above its rated start-to-open temperature. If the valve fails to open, the thermostat should be replaced.

Check fan belt adjustment. The water pump will not operate properly if the fan belt is not correctly adjusted. Follow the manufacturer's recommendations for adjustment.

Inhibitors

The cooling system may be treated for prevention of scale and rust formation. This process consists of introducing certain chemicals or chemical combinations into the water which counteract the formation of insoluble salts or minerals.

These chemicals, or inhibitors, are not cleaners and will not remove the rust and scale which have already formed. The object in using them is to form a very thin adherent, insoluble coating on the inner surfaces of the radiator and cylinder block. It is therefore more advisable to use an inhibitor immediately after thoroughly cleaning the system or when the engine is new.

Where the going is
TOUGH...
COLLOIDAL GRAPHITE
prolongs gear life.
" 'Dag' colloidal graphite is used in the jackshaft assembly of Sterling dual-drive trucks, built principally for off-the-highway operation where the going is tough. Ordinarily the wear would be excessive, but due to the graphite film on the gear teeth, friction and heat are defeated and gear life prolonged."
. . . Sterling Motor Truck Co., Inc.,
Milwaukee, Wis.
Write for Bulletin No. 92H entitled "Colloidal Graphite Lubricants."
The electric-furnace graphite in "dag" products is made in the U. S. A.
ACHESON COLLOIDS CORPORATION
PORT HURON, MICHIGAN
"dag" is a registered trade-mark
of Acheson Colloids Corporation.
dag
COLLOIDAL PRODUCTS

Specify DO-RAY Certified

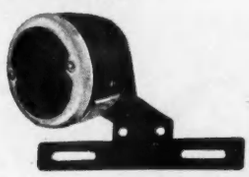
SAFETY LIGHTING and EQUIPMENT

TO MEET *Safety Equipment* REGULATIONS AND I. C. C. SAFETY REQUIREMENTS

DO-RAY Certified Safety Lighting and Equipment has been tested by recognized laboratories and passes specifications of S. A. E. and I. E. S. Meeting requirements of I. C. C. Here are a few numbers from the complete DO-RAY line. ASK YOUR WHOLESALER.

DO-RAY GIANT LITE STOP LIGHT With Angle Bracket

No. 70 Lamp with 32 C. P. Bulb. Ideal for trucks with bodies extending a considerable distance beyond rear axle. Lamp bolt and bracket hole spacing permit four different mounting positions. Overall diameter 7 7/8 inches. Lamp body and bracket of heavy gauge steel. Five feet of heavy duty wire.



DO-RAY STOP AND TAIL LAMP With License Plate Bracket

No. 1212. Tiger-Ey Hex-Flex lens. Chrome plated brass door. Black enamel body. Extra heavy, black enameled steel license bracket. A high quality product in great demand by fleet owners throughout the nation.

DO-RAY FLEXIBLE TYPE CLEARANCE LAMP

No. 1115. Flexible strap between attaching bracket and lamp permits free movement and reduces lens breakage to a minimum. Ground wire securely fastened between lamp and attaching bracket. Uses a 3-cp. single contact bulb. 2 1/2 inch lens. Cadmium finish.

DO-RAY FLUSH TYPE CLEARANCE LAMP

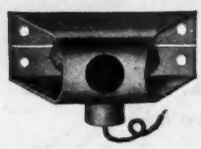
No. 1248 Lamp Complete with Bulb and Wire. Overall diameter 4 1/2 inches. Body diameter 3 inches. Depth of body from flange 1 1/4 inches. Heavy gauge steel body — chrome plated brass face plate. 3 C. P., 6-8 volt bulb. 3 inch semaphore lens furnished in red, green, amber or white.

SEALED BEAM FOG LAMP

No. 600 C. A.—Amber. A Glaseal beam fog lamp — latest unit by General Electric. 6 3/4 inches in diameter, sturdy Do-Ray construction. Chrome plated or black enamel, malleable iron bracket. General Electric Sealed Beam, All Glass, Amber Foglite Lens. Theft proof.

DO-RAY SUPER FLARES 3 Flares in Metal Box

No. 1308. Meets all I. C. C. and State requirements. Legal in most states. Will burn for 18 hours. Made of 22 gauge steel. Passes vibration, water, dust and wind velocity tests. A three flare unit packed in a heavy gauge steel container.



DO-RAY ALL RUBBER 3-JEWEL CLEARANCE LAMP

No. 1106-G3—3 Jewels. For clearance, marker or parking. Waterproof — dustproof — vibration proof. Lenses interchangeable making either right or left hand mounting possible with amber light in front and red light in rear to meet legal requirements. All rubber construction. Equipped with No. 63 S. C. bulb. Entire lamp protected by heavy cadmium plated metal guard.

DO-RAY NOBBY REFLEX SIGNAL

No. 1292. For trucks, busses and trailers. Molded, one piece lens is protected by metal mask. Will withstand the most severe abuse, salt water, acid, heat and cold. Passes all S. A. E. and E. I. S. tests. Furnished in Red, Amber, Green or White.

DO-RAY IMPROVED THREE-WAY LITE

No. 1132. Designed to meet present day driving conditions. Waterproof — dustproof. No taped connections to loosen because the wiring assembly is a solid brass strip. The bakelite insulating strip is backed by a heavy piece of live rubber which holds the wiring assembly in positive contact at all times. 20 inches overall. Black enamel finish.

CERTIFIED DO-RAY PRODUCT Tested by RECOGNIZED TESTING LABORATORIES PASSING SPECIFICATIONS OF S.A.E. AND I.E.S. MEETING REQUIREMENTS OF I.C.C. SAFER LIGHT SAFER SIGHT

DO-RAY LAMP COMPANY

1458 S. MICHIGAN AVE. · CHICAGO

SAFETY LIGHTING AND REFLECTING EQUIPMENT

ASK YOUR SUPPLY DEALE

LEGISLATIVE LOOKOUT

Kentucky approves 28,000 lb. g.v.w.; gas usage curtailment and speed limits occupy legislators

DURING the past month the trucking industry finally saw (or heard) the 28,000-lb. gross weight limit become law in Kentucky, the barrier state. The law contains certain reservations, principally a clause limiting the allowable gross weight to specified roads.

Otherwise legislatures were preoccupied mainly with speed limits and gasoline usage curtailments. Most states reacted favorably to President Roosevelt's request for 40-mile speed limits, with the exception of New York which passed along for another reading a bill to raise the limit from 40 to 50 miles.

Georgia, Florida and Kansas enacted reciprocity agreements and Virginia is dead set to tax carriers, who do not buy gas in that state, an amount commensurate with the miles traveled.

Most legislatures are also considering measures designed to refund part of the license fee to motorists with 1942 plates who have to store their vehicles because of lack of tires, parts, etc.

A resumè of bills which have become law, or which are still being deliberated or have been introduced, follows:

BILLS MADE LAW

GEORGIA

New reciprocity agreement by Georgia and Florida grants full reciprocity to passenger cars and private trucks in interstate commerce carrying property of owner. Also grants full privileges to for-hire buses and trucks except for regulatory fees of Georgia Public Service Commission and Florida Railroad Commission.

Reciprocity agreement between Georgia and Kansas has been amended to grant reciprocity to for-hire trucks and buses except for Kansas mileage taxes on occasional trips and over irregular routes.

KENTUCKY

H. 157 provides that automobiles with interchangeable bodies for use as truck or passenger car shall pay registration fee required for trucks.

H. 152 provides for assessment of bridge companies, express companies, bus and truck lines which extened beyond limits of state.

NEW YORK

Governor has signed Anderson measure eliminating necessity for reporting accidents which cause damages of $25 or less and removes necessity of driver furnishing proof of financial responsibility if driver shows he is not responsible for accident.

VIRGINIA

H. 124 requires carriers who do not buy gasoline in Virginia commensurate with mileage traveled to pay equivalent gas tax into state highway fund.

BILS ACTED UPON

KENTUCKY

H. 338 requires all vehicles, other thar those engaged in transportation of passengers for hire. To register with a county clerk.

S. 81 provides for recording all mortgages executed by railroads and motor transport lines. Reported favorably in House.

S. 180 provides that money received by counties from truck registration fees shall be expended for labor and material in connection with county roads. To second reading in Senate.

MISSISSIPPI

H. 599 reduces registration fees on vehicles of "private commercial carriers of

(TURN TO PAGE 124, PLEASE)

PROTECT YOUR DRIVERS AND TRUCKS FROM FIRE

WITH

MHS Safety Fuel Tanks

Approved by Underwriters' Laboratories Inc.

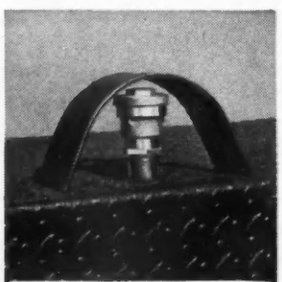
• Equip your trucks with M.H.S. Safety Fuel Tanks —they meet every requirement for safe, efficient, trouble-free operation. In addition to the safety pressure valve (illustrated and described at the right) these tanks are provided with measuring sticks for each spout to avoid unnecessary dumping when crossing state lines—thief-proof pockets that prevent fuel thieving during rest stops—easily accessible filter and sediment traps—and many other advantages.

M.H.S. Safety Fuel Tanks are of rigid all-welded construction, and are trussed internally to withstand severe treatment without damage.

Safety and protection from fire have never been as important as now—and remember, after a fire starts, it's too late then to equip the truck with a Safety Fuel Tank.

75–85–105 AND 125 GAL. CAPACITIES

Write for fully descriptive folder



This Safety Pressure Valve supplies pressure and vacuum relief for normal operation—prevents fuel from escaping even when the tank is in upside down position—and provides extra venting capacity under fire conditions preventing explosions.

MHS Safety Fuel Tanks

DESIGNED AND MANUFACTURED BY

MECHANICAL HANDLING SYSTEMS, INC.

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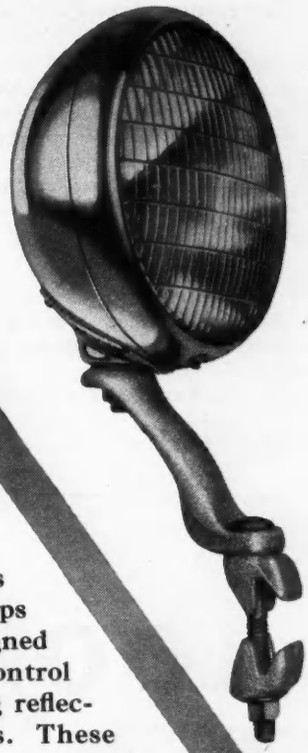
WORLD'S LARGEST MANUFACTURER OF AUTOMOBILE TRANSPORT TRAILERS

GUIDE AUXILIARY LAMPS



The Right Equipment for Your Fleet

Guide engineering and Guide research have produced the auxiliary lighting equipment you want on your fleet.

For improved visibility when the going is heavy, there are Guide Auxiliary Lamps with prefocused bulbs, correctly designed lenses, and special bulb caps to control stray beams that cause blinding reflections from moisture particles. These lamps, available in many types and styles, have demonstrated their effectiveness and dependability in hard fleet service.

Other Guide lamps popular with fleet operators are Guide Driving and Passing Lamps. They provide an added margin of safety on long hauls . . . are sturdy, easy to mount, and easy to service.

Your Guide jobber will co-operate with you in determining the right style and type of Guide Auxiliary Lamp to meet your requirements. Replacement parts are immediately available through United Motors distributors everywhere.

GUIDE UNIVERSAL REPLACEMENT HEADLAMP ASSEMBLIES—Dependable, sturdy, complete headlamp assemblies for replacement of damaged or worn-out equipment.

GUIDE DIRECTIONAL SIGNALS—Solidly built turn-indicator systems that give easily visible signals. Choice of single- or double-face lamps and several types of mounting.

GUIDE STIMSONITE REFLECTORS—Manufactured with plastic lens, these sturdy reflectors are important safety equipment for all fleets. Universal in application.

UNITED SERVICE MOTORS

Guide products and service parts are available through independent United Motors distributors served by 20 conveniently located warehouses. This wide availability of parts and service is important to truck and bus operators.

Guide LAMP

Division of General Motors Corporation
Anderson, Indiana

WORLD'S LARGEST MANUFACTURER OF AUTOMOTIVE LIGHTING EQUIPMENT

(CONTINUED FROM PAGE 122)

property" and "drays" to $10 if carrying capacity one ton or less. To Committee.

S. 267 increases gross weight from 30,000 to 36,000 lb. Reported unfavorably in Senate.

H. 286 would permit quarterly payment of registration fees by motor carriers. Passed Senate, rejected in House.

NEW YORK

S. 695 would refund 1942 registration fees to manufacturers and dealers if plates not used. To Committee.

S. 693 would make it a misdemeanor to make false statement in reporting motor vehicle accidents. To Committee.

S. 296 (Applicant for registration of motor vehicles more than five years old to contain statement that vehicle has been inspected and found to be fit for further service.) Amended and recommitted to Senate Committee.

H. 817 permits placing of Federal use tax stamps on windshields or rear windows.

H. 821 provides that contributory negligence of person using a motor vehicle shall be imputed to owner. Reported favorably and sent to third reading in House.

H. 1847 would provide that owner of vehicle registered in 1942 who loses use of vehicle by surrender of tires shall receive refund on surrender of registration certificate and license plate to Motor Vehicle Commissioner. To Motor Vehicles.

House passed Senate bill regulating acquisition of motor vehicle tires. Measure provides that persons buying tires from unlicensed persons or otherwise than through rationing boards must report purchases to local police within 10 days after purchase.

H. 427 would establish a 50-mile speed limit. Reported favorably in House.

RHODE ISLAND

House Committee reported favorably bill to increase gross weight of trucks to 46,000 lb.

H. 704 would increase gross weight for two-axle trucks from 32,000 to 36,000 lb. and three-axle trucks from 40,000 to 46,000 lb. Passed by House.

H. 853 would permit persons unable to operate car because of tire rationing or other restrictions to turn in plates and receive pro rata rebate. To Finance.

VIRGINIA

H. 390 would refund portion of license fees when vehicles cannot be operated because of lack of tires and tubes. Referred to Committee.

H. 410 would make it a misdemeanor to operate a motor vehicle unless Federal use tax stamp is affixed thereto. H. 411 would prohibit issuance of inspection certificate for any vehicle unless Federal use tax stamp is affixed thereto. Referred to committee.

H. 198 revises present system of taxing commercial vehicles in line with recommendations of special study commission. Several new amendments are being considered. One would eliminate the 2 per cent gross receipts tax and another would reduce license fee scale for weights in excess of 16,000 lb., and a third would increase license fee for contract carriers with gross weight over 18,000 lb. by 50 per cent over rate for other trucks. To House Committee.

Senate subcommittee has been named to study S. 198 to relieve operators of motor vehicles used for agricultural purposes of annual license plates and state gas tax.

House passed H. 198 to substitute gross weight basis for licensing trucks; brings contract carriers under 2 per cent gross receipts tax now paid by common carriers with first $3,500 for any calendar year exempted. License fees would range from minimum of 12 cents per cwt. to 50 cents per cwt. for those with gross weight exceeding 30,000 lb. Governor would be authorized to enter into reciprocity agreements. State Highway Commissioner is authorized to permit 40,000 lb. gross weight on designated highways.

H. 435 requires persons striking unattended vehicles to leave identification on damaged vehicle and report accident. Reported with amendment in House.

S. 185 would impose a tax of 6½ cents per gallon on diesel fuel. Reported favorably in Senate.

H. 39 Senate and House conferees agreed on new speed limits of 45 miles for pas-

(TURN TO PAGE 126, PLEASE)

LOOK!

Bearing performance standards have changed! Get acquainted with the bearing that is making such a big hit with fleet owners in all parts of the nation!

LINK-BELT ROLLER BEARINGS

FOR FRONT WHEELS, DIFFERENTIALS AND REAR AXLES

• Because of exclusive concave-convex roller and raceway design, this bearing provides greater load capacity, super smooth action and extra long wear. Just what you need for replacement in any truck — light or heavy. Try a set and see for yourself—your jobber will supply you!

Made by the makers of the famous Silverstreak Silent Timing Chain!

LINK-BELT COMPANY

519 N. Holmes Ave., Indianapolis, Ind. Warehouses in all principal trading centers

For Maximum Brake Performance Standardize on Wagner CoMaX

..there's no better brake lining

During this war period when Fleet Operators and Truck Owners are vitally interested in ways and means of conserving the life of their vehicles—brake maintenance takes on added importance.

Today it is more important than ever to standardize on Wagner CoMaX for maximum brake performance. This superior product, has the following features and advantages:

1. CoMaX IS LONG LIVED. It wears slowly and gives longer service.

2. HAS REINFORCED BACKING. Permits deep seating of rivets and increases thickness of lining available for braking service.

3. NON-COMPRESSIBLE. Does not compress under brake pressure. Brakes lined with Wagner CoMaX run for long intervals without needing adjustments.

4. UNIFORM IN TEXTURE. As the lining wears, the same type of brake surface is always exposed to the drum.

5. EASY ON DRUMS. Contains no abrasive material.

6. QUIET. Grips silently. No howling or squealing.

7. SMOOTH. Uniform friction permits even, controllable deceleration.

8. AGE-PROOF. Does not deteriorate with age.

9. RIGIDLY TESTED. Wagner maintains 26 proving grounds.

The Wagner background of 17 years' research and experience in manufacturing brakes is reflected in the way that CoMaX Brake Lining stands up under severe service. CoMaX is available in sets, rolls, blocks and slabs.

Don't delay! Ask for a copy of the Wagner Catalog BU-128. It is unusually complete. It gives specifications for trucks, buses, and passenger cars. It's FREE, so ask for your copy NOW!

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Please send free copy of Catalog BU-128.

Name and Position_____

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I buy my lining from_____

War workers and Victory materials must be transported. It is your obligation now, more than ever before, to assist in keeping car and truck brakes in proper working condition. For maximum brake performance, specify CoMaX. Consult your Wagner jobber, or write us.

(CONTINUED FROM PAGE 124)

senger cars and buses and 40 for trucks.

BILLS INTRODUCED

KENTUCKY

H. 599 would exempt all motor vehicles from ad valorem tax, increase license fees and allocate part of proceeds to municipalities.

H. 350 would provide fees for all trucks and buses graduated from $25 if gross weight not over 8,000 lb. to $265 if gross weight between 24,000 and 28,000 lb.

H. 384 would impose tax of 1 cent a gallon on gasoline not subject to present 5 cents gas tax; one-third of which would go to state highway funds and two-thirds to counties.

H. 350 changes registration fees for trucks and buses from carrying capacity to gross weight basis. If trucks or buses operated for hire fees would range from $25 if gross weight 8,000 lb. or less to $265 if gross weight between 24,000 lb. and 28,000 lb. Private truck or bus fees graduated from $10 if gross weight 6,000 lb. or less to $200 if gross weight between 24,000 lb, and 28,000 lb. All trucks with gross weight over 28,000 lb. would pay $500.

PRODUCTION FOR VICTORY
. . . Kellogg has accepted its responsibility to a fighting America. Currently in production are compressors and special parts and assemblies for the Army, Navy and Air Corps.
A KELLOGG-AMERICAN CERTIFICATION means Profitable Operation for You . . . All Kellogg-American equipment must survive thorough testing — a merciless workout, far harder than any service you can give it. Kellogg takes the grief, you get long service, low upkeep and power cost, the most you can get for your money in shop equipment.
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AIR COMPRESSORS · CAR LIFTS · CAR WASHERS · PAINT SPRAY EQUIPMENT

MISSISSIPPI

S. 268 would authorize Attorney General, Governor and Motor Vehicle Commissioner to enter into reciprocal agreements with other states.

H. 666 levies privilege or excise tax for privilege of using highways and authorizes collection by Motor Vehicle Commissioner.

H. 670 provides for assessment for taxation of motor carriers by State Tax Commission; requires reports and returns.

H. 376 reduces fees for private trucks to range from $6 for carrying capacity of one-half ton or less to $40 if carrying capacity between nine and ten tons.

H. 666 requires common, contract and private carriers of persons and property in interstate commerce from without the state to pay a gasoline tax of 6 cents per gallon on gasoline not purchased in the state.

NEW JERSEY

S. 103 would increase length of trucks to 35 feet.

NEW YORK

H. 1190 would impose penalty up to $1,000 for failure of motor carriers and brokers to comply with Public Service Commission orders.

H. 1193 and H. 54 provide for compulsory semi-annual inspection of vehicles at state-owned and operated stations.

H. 1304 refunds registration fees for that part of 1942 on vehicles equipped for transportation of property or tractors or trailer which cannot be operated because of some action on part of U. S. in connection with war.

H. 1354 and H. 1110 provide monthly periodic reduction of registration fees.

H. 1523 provides common or contract carriers during war emergency may transport food, farm machinery, animals, and household equipment notwithstanding restriction by Public Service Commission.

H. 1656 would require all motor vehicles to carry emergency lighting equipment now required of buses and trucks. To Committee.

PENNSYLVANIA

H. 53-X and S. 49 would suspend for limited time all laws requiring registration of trailers drawn by tractors or motor vehicles.

RHODE ISLAND

H. 791 constitutional amendment would prohibit diversion of motor vehicle taxes.

H. 811 would require non-resident trucks to obtain Rhode Island registration unless reciprocity is granted by home states.

Governor's tax bill, H. 808, proposes a tax of $1 on each $1,000 of motor transportation revenue.

SOUTH CAROLINA

H. 1324 makes it unlawful to mutilate, deface, or obliterate the serial number of any motor vehicle tire and to buy or sell any tire upon which the serial number has been so mutilated.

CCJ QUIZ

by ROBERT F. BAHL

(Correct answers on Page 138)

Truck drivers—like the Greeks—have a word for it. Each of the 10 questions concerns some picturesque expression in the lingo of the American truck driver. Give yourself a credit of 10 points for each correct answer.

1

A driver is going out empty. Using truckers' lingo, you would say that:

a. He was driving a load of wind.
b. He was pulling a tunnel.
c. He had a load of post holes.
d. He had a pension run.

2

All the Eskimos aren't in Alaska and Greenland. There are plenty on the U. S. highways, because an "Eskimo" means:

a. A fellow who drives with his windows open.
b. A refrigerator truck.
c. A truck hauling ice.
d. A reckless driver.

3

With the rubber shortage, tires probably will soon take on some more precious epithets, but until now they've been known as:

a. Doughnuts. c. Hoops.
b. Bolognas. d. Gum shoes.

4

Translate from truck driver jargon into common, every-day English: "She's a museum piece, but she's house-broken."

a. The truck isn't much to look at, but it belongs to me.
b. It took a long time to do it, but the truck is finally all paid.
c. It's an old truck, but it doesn't leak anywhere.

5

Now translate this from every-day English into truck driver lingo: "He put it into low gear."

a. He went down in the kitchen.
b. He put her in the grandma hole.
c. He beached her.

6

Truck drivers have paraphrased the initials of the Interstate Commerce Commission into:

a. Ickes' Cock-eyed Control.
b. It Could Cooperate.
c. I Can Catch.

7

Just one matching test to break up the monotony. Pair up these picturesque terms with their more prosaic meanings:

a. Peanut wagon. c. Pup.
b. Scow. d. Bareback.

1. Tractor without trailer.
2. Small truck that pulls a large trailer.
3. Narrow tread four-wheel trailer.
4. Truck with capacity to handle a big load.

8

Which of these would you use to "shake down the ashes?"

a. Armstrong starter. c. Cement mixer.
b. Thumb buster. d. Emerjenson.

9

The Men, spelled with a capital letter, could mean no one else but:

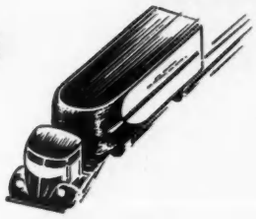
a. The truck drivers themselves.
b. Company spotters.
c. The bosses. d. Police.

10

Before we say good-bye, can you tell us what Bill means when he says that Joe is a "bedsteader?" He means that he is:

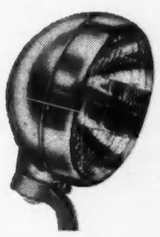
a. A night driver.
b. A good driver in the daytime, but bad on night runs.
c. Late for work.
d. A furniture hauler.

LIGHTING EQUIPMENT HOLDS PRIORITY AT ARROW

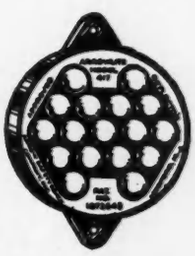


● With ARROW, lighting devices are a specialty. There is an ARROW lamp or reflector for every bus and truck need — all designed and made to meet today's tough requirements.

Whether you are the manufacturer of new equipment, or interested in maintenance, it will pay you to investigate ARROW Lighting Equipment. For full information address Dept. 122.



For Army vehicular equipment, ARROW manufacturers Plastic Reflex Reflefictors . . . Rear Vision Mirrors . . . Blackout Tail and Blackout Stop Lamps . . . Service Tail and Stop and Blackout Lights. Price inquiries welcomed.



ARROW SAFETY DEVICE CO., Inc.
MEDFORD, NEW JERSEY

● Rich Valves are made of Silcrome-X steels — not just one steel, but 12 kinds. Rich engineers know it takes that many to give efficient performance in the different makes and models of cars and trucks. When you install the specified Rich Valve in any engine, you can be sure that you are getting the very best that valve money can buy for your particular engine.

WHEN is a truck more than a truck?

Today—in wartime—a truck is a vital piece of machinery that must keep going if victory is to be made certain.

No less than production machine tools, which count their cost in men and military advantage as long as they remain idle, trucks too are part of America's industrial might.

Delivering the goods is every bit as

important as manufacturing them. Now as never before certainty and speed of delivery depend upon the quality and stamina of engine parts.

Operators know this. That is why more and more of them are buying from the jobber who handles only *trustworthy* engine parts, including—

RICH VALVES *of Silchrome-X Steels*

the McQuay-Norris Jobbers

IN ALL PRINCIPAL CITIES. AMPLE STOCKS AND IMMEDIATE SERVICE ON THE PRODUCTS OF McQUAY-NORRIS MANUFACTURING COMPANY, ST. LOUIS, MO.

ODT TO OK POOLING PLANS

Approval by Office of Defense Transportation of pooling schemes is guarantee against prosecution

ADVICE and assistance will be given to local business enterprises seeking to readjust local delivery services as a means of conserving trucks, tires, and other equipment and materials, it was announced on March 12 by the Office of Defense Transportation.

Effective immediately, proposed plans for pooling deliveries, curtailing services, or other joint action may be submitted to the ODT for consideration and approval. Under an arrangement worked out by the ODT and the Department of Justice, the ODT will submit all such plans to the Department for clearance as to their legality under the anti-trust laws.

Pending the establishment of field offices by the ODT, proposed plans should be submitted in written form to John L. Rogers, Director, Division of Motor Transport, Office of Defense Transportation, Washington, D. C.

The attached joint statement by the ODT and the Department of Justice sets forth details of the procedure to be followed in submitting proposed plans to the ODT and states the views of the Department of Justice as to the applicability of the anti-trust laws to such arrangements.

Joint Statement By Office of Defense Transportation and Department of Justice Relative to Local Delivery Service By Motor Vehicle

The Office of Defense Transportation and the Department of Justice are currently receiving many requests from business enterprises concerning ways of conserving rubber and other vital materials in making local deliveries. Inquiries addressed to the ODT ask for help and advice. The Department of Justice is receiving inquiries as to the bearing of the anti-trust laws upon voluntary collective action to conserve these materials, and likewise complaints from consumers and competitors who believe that some program proposed or already in use violates these laws.

The ODT and the Department of Justice are united in a desire to expedite such conservation programs and to assure their development along lines which will avoid abuse.

The ODT will give advice and assistance in the development of such programs. The Department of Justice will facilitate this development by reviewing such programs in advance when they are submitted to it by the ODT and by indicating in advance its approval of programs which appear to be lawful under the anti-trust laws. It will likewise be available to prosecute any cases in which such programs are abused or perverted contrary to their original intent.

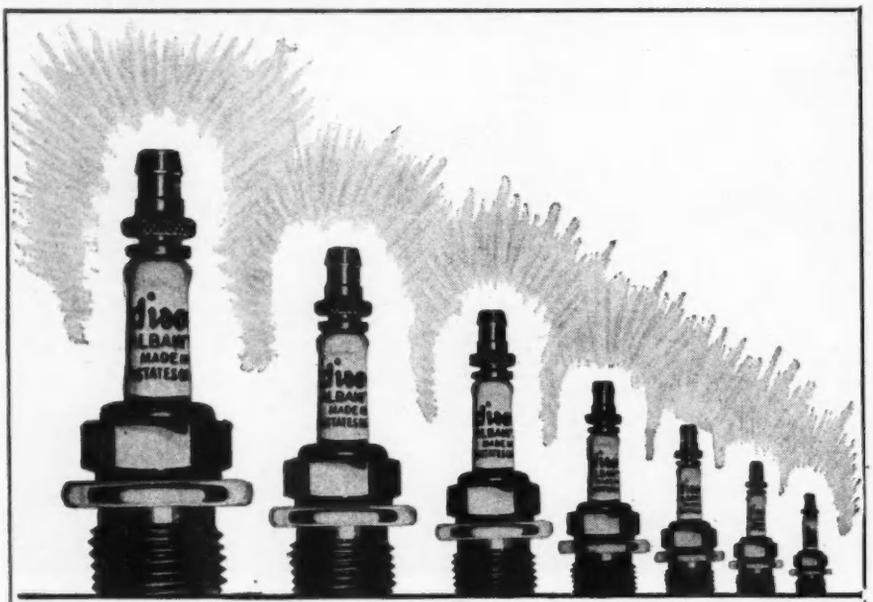
The two agencies will act in close cooperation in order that the readjustment of delivery systems may be as rapid and as free from abuse as possible.

Procedure for Submission of Proposed Plans to the Office of Defense Transportation

It is of paramount importance that rubber, motor vehicle equipment, and other vital materials used in the rendition of local delivery service be conserved to the greatest extent possible at the earliest possible date. Therefore, the ODT recommends that the procedure outlined below be followed in establishing plans or programs which have as their sole purpose the conservation of such materials:

1. In the development of such programs the fullest possible consultation should be had with all interested or affected parties including consumer groups (insofar as they are organized).

(TURN TO PAGE 134, PLEASE)



TODAY'S "FIRING LINE"

To conserve vital material for military use, buy equipment that lasts *longer* and gives *better* service. Today's Edison Spark Plugs are the finest that ever came out of the great House of Edison. Engineered to their particular jobs, Edison Plugs are made in a heat range that permits a "custom fit" for all conditions of road speed and load. Scarce—but get them if you can. They cost no more.

ALLIED VICTORY PROGRAM
WE PRODUCE
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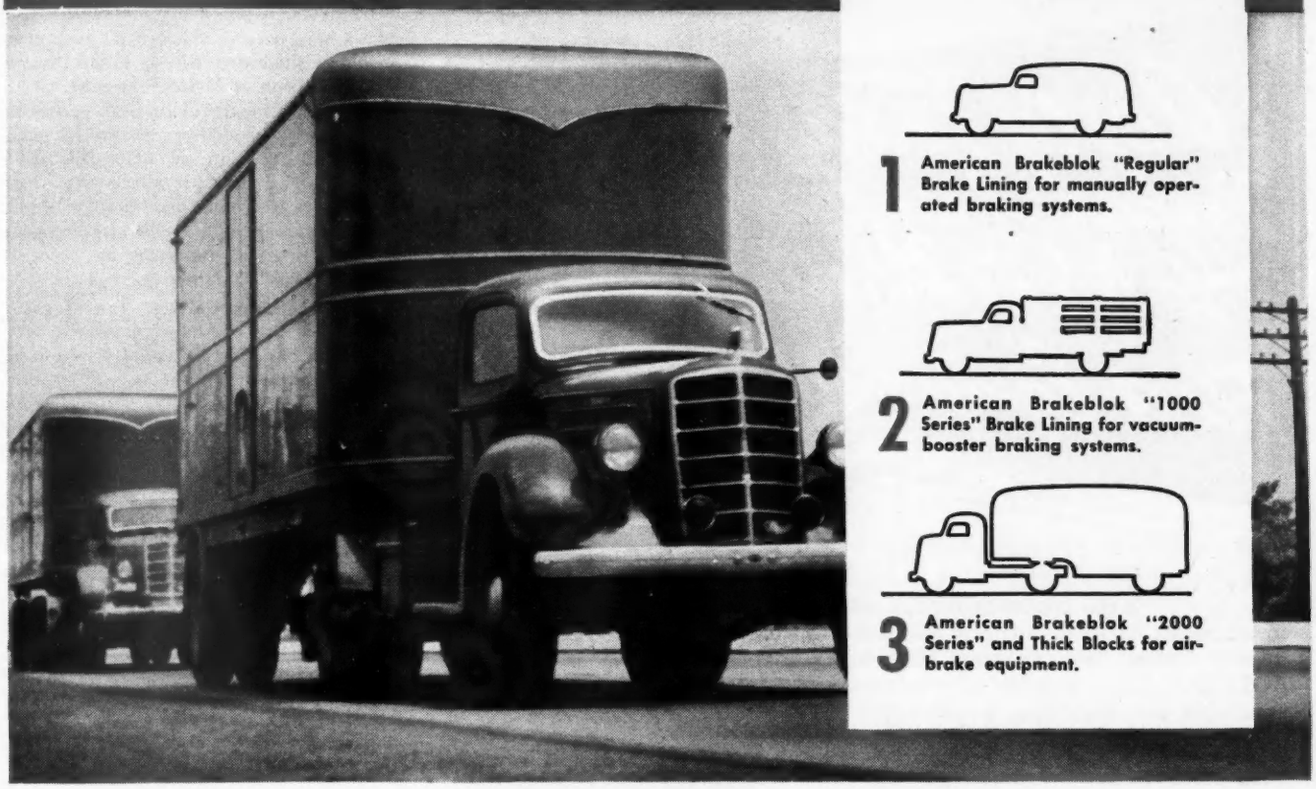
FLEET OPERATORS EVERYWHERE

USE FREE AMERICAN BRAKEBLOK BRAKE LINING ADVISORY SERVICE



1 American Brakeblok "Regular" Brake Lining for manually operated braking systems.

2 American Brakeblok "1000 Series" Brake Lining for vacuum-booster braking systems.

3 American Brakeblok "2000 Series" and Thick Blocks for air-brake equipment.

American Brakeblok
BRAKE LINING

Use American Brakeblok Brake Linings and Benefit From the Industry's Best Research and Testing!

FLEET OPERATORS everywhere report increased brake-lining mileage, improved brake operation, after using our engineers' free Brake Lining Advisory Service, and one or more of three specialized types of American Brakeblok Heavy-Duty Brake Linings. It's easy to use this service; just let your American Brakeblok representative fill in an Advisory Service form for your fleet, or write us direct.

NAPA Assurance of Quality

Master stocks in 38 NAPA Warehouses.
Jobbers everywhere give prompt service.

American Brakeblok Division of The American Brake Shoe & Foundry Co.
Detroit, Michigan

(CONTINUED FROM PAGE 132)

2. In the event a joint voluntary plan of action has been adopted by any group (which plan of action in all instances should be reduced to writing and signed by all persons party thereto and such persons desire that such plan shall be cleared by the Office of Defense Transportation and the Department of Justice, prior to the effectiveness thereof, such clearance may be procured in the following manner:

a. The plan so adopted should be immediately forwarded to John L. Rogers, Director, Division of Motor Transport, Office of Defense Transportation, Room 4211, Interstate Commerce Commission Building, Washington, D. C.

b. The plan so submitted will be reviewed by the Director and any questions which it raises under the anti-trust laws will be discussed with the Department of Justice. If the Director approves the plan and the Department of Justice sees no legal obstacle to carrying it out, it will be cleared and the persons party thereto so advised. If the plan contains provisions which the Director does not approve or which appear to violate the anti-trust laws, such persons will be advised in order that the plan may be improved and reconsidered.

3. In the event that any group desires to establish a plan for the conservation of rubber, motor vehicle equipment, or other vital materials in connection with local delivery service but are unable to agree upon the terms and provisions of such a plan, they may, if they so desire, submit such matter to the Office of Defense Transportation for such consideration and action as it shall determine to be necessary or advisable in the premises.

The ODT is presently engaged in establishing regional field offices in certain of the principal cities throughout the country. As soon as such offices have been established any such conservation plan may be submitted to the ODT either through such field offices or directly to the Office of the Director of its Motor Transport Division in Washington. Until such time as such field offices have been established all such plans should be submitted directly to the Director of the Division of Motor Transport.

The ODT is hopeful that all parties interested in local delivery service by motor vehicle will recognize the seriousness of the existing situation as it affects such local delivery service and that they will take prompt and effective steps in consonance of the foregoing statement in order to alleviate such situation.

Applicability of the Anti-Trust Laws: Views of the Department of Justice

To aid business enterprises in working out ways to meet the shortage of facilities for the operation of local delivery systems, the ODT has established a procedure for clearance of plans for the conservation of materials necessary in local delivery services.

Any action taken in accordance with a plan approved by the ODT cannot be prosecuted under the anti-trust laws. It is not a conspiracy so long as it follows a plan approved or requested by the appropriate Government agency. The emergency requires that the decision of the ODT that this procedure is in the interest of efficient transportation during the period of national emergency be taken as final.

Inasmuch as action to combine the operation of local delivery services must be taken quickly and often before consultation with the ODT, the following statement as to the application of the anti-trust laws in such situations may be taken as a guide prior to official request or approval.

Even without specific approval, programs established during the emergency for the sole purpose of conserving rubber and other scarce materials used in local delivery services are obviously not violations of the anti-trust laws. Such violations would arise only if such programs included unreasonable restraints of trade not logically related to conservation, such as price fixing, elimination of independent businessmen, or perpetuation of inefficient systems of distribution. Certain safeguards which will make it easier to avoid unreasonable restraints of trade are set forth below in statements concerning the two most common methods used to conserve tires.

(1) *Pooling of delivery service.* This method involves joint use of the same truck to deliver goods sold by competitors, each of whom formerly made separate arrange-

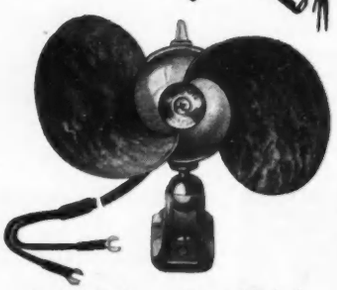
(TURN TO PAGE 136, PLEASE)

THE resourcefulness, ingenuity, and forethought of fleet owners will be taxed to the utmost during this year of 1942 to "KEEP 'EM ROLLING" . . . in spite of equipment shortages and servicing handicaps.

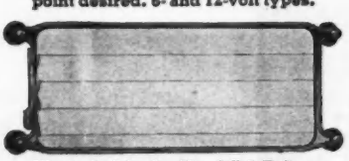
During the past six months American industry has learned that "foresight" is much better than "hindsight". *Today* is not too early to be thinking about your next winter's equipment requirements.

Your trucks will need Fulton Electric Sleet-Frost Shields and Rubber-Bladed Defrosting and Ventilating Fans. Clear Vision will continue to be the first essential to *safe* driving . . . and safe driving will be of greater importance to you, and to the nation, than ever before. Clear vision *in any weather* can only be maintained with adequate defrosting equipment.

While War demands come first, we are still in position to produce, in limited quantities, Electric Sleet-Frost Shields and Defrosting Fans for essential service. Anticipate your next winter's needs NOW. Order from your jobber—*today*.



No. 496 Fulton rubber-bladed Defrosting and Ventilating Fan employs a unique, universal type mounting bracket which permits installation at practically any point desired. 6- and 12-volt types.



Illustrated is the No. 1-F-3 Fulton Electric Sleet-Frost Shield. Keeps inside of windshield clear of frost and steam *without* electric current. A flip of the switch melts sleet, snow and ice on the outside surface.

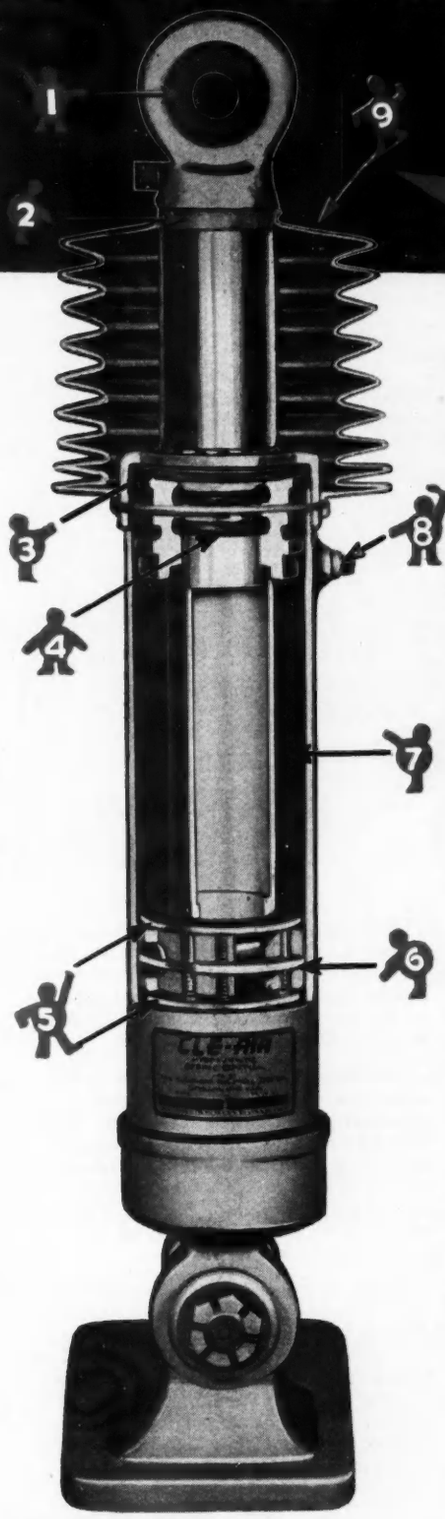
THE FULTON CO. 1912 South 82nd Street Milwaukee • Wisconsin

A 3713

CLE-AIR

HYDRAU-MATIC SHOCK ELIMINATORS

HAVE THESE *Exclusive* FEATURES



GIVE THESE *Important* ADVANTAGES

1 RUBBER MOUNTING BUSHINGS
Universal action—No vibration.

2 PISTON AIR CHAMBER
Soft cushion for impact.

3 CONSTANT TENSION WIPER
Seals against dirt and water entering the unit.

4 FIXED PACKINGS
No adjustment necessary.

5 PATENTED CONTROL VALVES
Permits double action and free centering of unit.

6 PISTON HEAD RING
Positive sealing action between control chambers.

7 FLUID CHAMBER
Large volume and effective area permit positive action with low pressures.

8 PRIMING PLUG
Permits maintenance of positive fluid level without removal of unit from vehicle.

9 BOOT
Protects piston from dirt and weather.

LESS TIRE WEAR . . . Cle-Air Units eliminate the bouncing on and off the road that buffs off the rubber. They also prevent "sidesway scuff" to tires because they stop rolling and swaying.

LESS DRIVER FATIGUE . . . Cle-Air takes the "drive" out of driving. The vehicle just "breezes along" without the usual rolling and pitching; shocks are "short circuited" before they reach you.

LOWER MAINTENANCE COSTS . . . Cle-Air reduces body, chassis and spring repair. These units also protect valuable cargo and give a smooth restful ride for passengers.

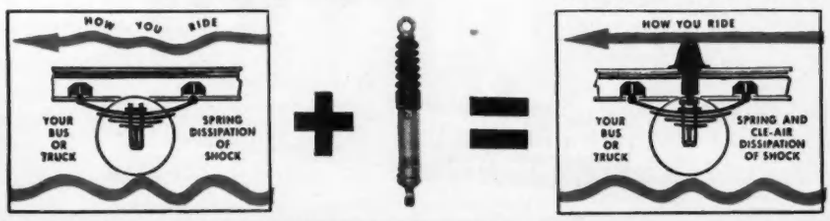
Cle-Air Hydrau-Matic Shock Eliminators are *not* "airplane type" shock absorbers. They are airplane shock absorbers—identical in operating principle with our world-famous Aerol landing struts for aircraft.

Now that war is putting our transportation system to its severest test, you can't afford to be without Cle-Air Hydrau-Matic Shock Eliminators. *Cle-Air keeps 'em rolling!* Write now for complete information.

THE CLEVELAND PNEUMATIC TOOL CO.
3734 E. 78th St. Automotive Division Cleveland, Ohio

★

CLE-AIR SPRING CONTROL AT A GLANCE


HOW YOU RIDE
YOUR BUS OR TRUCK
SPRING DISSIPATION OF SHOCK
HOW YOU RIDE
YOUR BUS OR TRUCK
SPRING AND CLE-AIR DISSIPATION OF SHOCK

The Cle-Air Unit is a heavy duty double acting, hydraulic-pneumatic type, operating on the "free center" principle, which allows unrestricted steel spring action on smooth roads. However, when the wheels meet an obstruction, the shock absorbing and snubbing action of the Cle-Air Unit comes into play, holding the vehicle on an even keel, eliminating roll and sway.

(CONTINUED FROM PAGE 134)

ments for delivery. It eliminates duplicate mileage of delivery trucks down the same street in residential areas.

The mere establishment of a jointly used facility by a group of rival business men does not necessarily violate the anti-trust laws. Jointly maintained inspection departments, statistical bureaus, and similar agencies have long been operated in many industries; and in some cities large department stores have maintained a joint system of package delivery for many years. The Department of Justice sees no reason to regard joint systems of delivery during the emergency as violations of the anti-trust laws if they are established for the sole purpose of conserving rubber and are so organized that they do not in fact accomplish additional purposes of restraining trade, however:

(a Competitors should not be excluded from the market or handicapped in their access to it by discrimination in the use of joint systems of delivery. Under ordinary circumstances, any competitor is free to set up his own delivery system or to hire the service of a commercial trucking company. The present emergency has destroyed or severely limited these alternatives. Therefore, in any situation in which the market is so small or the competitors so few that the maintenance of two or more joint delivery systems is not practicable, exclusion of any competitor from the right to use a joint system probably would amount to his exclusion from the market, and discrimination against him in service rendered, or charge imposed, probably would amount to joint activity to handicap him in the market. Such exclusions or handicaps probably would be in violation of the anti-trust laws.

(b) Joint delivery should not be made the excuse for joint selling activities. The merger of delivery service does not require the merger of the facilities which produce or sell the goods, the setting up of joint sales agents, nor the adoption of a single brand name to replace the separate brands formerly sold by business rivals. To extend a program of joint action in these directions is to raise issues under the anti-trust laws which are irrelevant to the central need to conserve rubber. Trades which have been accustomed to use the deliveryman as salesman and collection agent may be under especial temptation to delegate to the drivers of jointly operated trucks the functions of jointly representing concerns in selling as well as delivery. However, other arrangements for sales promotion can be worked out which involve less risk of conspiracy to raise prices; if such joint selling schemes are adopted and unreasonable restraints upon commerce ensue, the restraints cannot be regarded as a reasonable result of the rubber shortage.

(2) *Diminishing the frequency of delivery service.* Such a program is often practicable only when jointly undertaken, because any competitor who made deliveries more frequently than his competitors would enjoy a substantial advantage which would enable him to divert trade to himself. Where such a restriction of delivery service contains no other feature than a plan to conserve rubber during the emergency by reducing tire mileage, the Department of Justice does not regard it as an unreasonable restraint of trade within the meaning of the anti-trust laws. Care should be taken, however, to avoid making this program a basis for the accomplishment of restraints not logically involved in it.

(a Specifically, no immunity under the anti-trust laws would be afforded a group which adopted a schedule for delivery deliberately selected to handicap certain competitors by avoiding the times or dates at which these competitors would find it easiest to make deliveries.

(b) Neither would immunity be afforded a group which adopted a delivery schedule deliberately intended to handicap one group of consumers for the benefit of another. The Department would be concerned about the possibilities of abuse in plans which involved discrimination as to delivery service among groups of customers upon the basis of their wealth, past volume of purchases, or similar considerations irrelevant to the question of conserving rubber.

In the development of such programs, the fullest possible consultation with all interested competitors and with consumer groups, in so far as they are organized, in a sincere effort to take account of their needs is a persuasive indication of good faith. (TURN TO PAGE 138, PLEASE)

SAVE TIRES..
and BEARINGS
SAVE TIRES by proper inflation and proper alignment of wheels. Misalignment is often due to worn bearings. Every fleet maintenance man should watch for this common cause of tire damage.
Therefore, front wheel bearings should be carefully washed, dried and repacked with fresh lubricant and correctly adjusted at least every 5,000 miles. To do this, otherwise "messy" job in factory fashion you should use Ahlberg Front Wheel Service Equipment. It is low in cost, easy to use and is highly profitable.
When ball bearings are badly worn and must be replaced, use Ahlberg Ground Bearings. These ball bearings are used as standard replacements by many leading fleet operators and industrial plants. They are guaranteed to give new bearing service and most important of all they are obtainable without restrictions.
Save all worn Ball Bearings for reprocessing the AGB Way
AHLBERG
BEARING COMPANY
Manufacturers of CJB Master Ball Bearings
3006 WEST 47th STREET • CHICAGO, ILL.
Out West at PRECISION BEARINGS, INC. Los Angeles

The more your country needs your trucks, the more you need HALL service equipment.

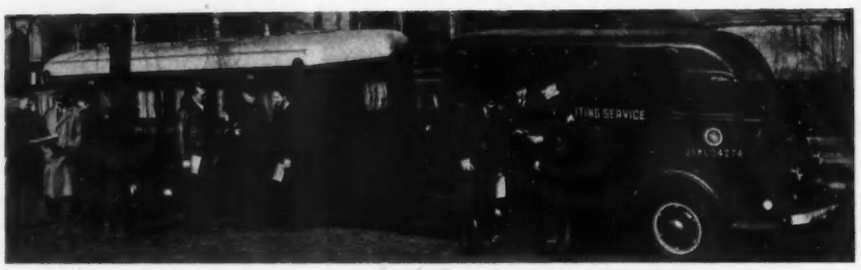
Getting finer precision and finish faster results in greater fuel and operating economy, better performance longer between overhauls, longer life for your vehicles and lower maintenance costs.

Consult your HALL Jobber or write the factory today for complete information.

Shown at right: HALL Valve Seat Inserter, ECCENTRIC Valve Seat Grinder, Piston Pin Hole Hone, Adjustable Valve Guide Cleaner. At upper left: HALL Ring Ridge Reamer and Model H Cylinder Hone. At lower left: HALL Wet Type Valve Refacer, Hydraulic Brake Hone.

THE HALL MANUFACTURING CO., 1610 WOODLAND AVENUE, TOLEDO, OHIO

HALL

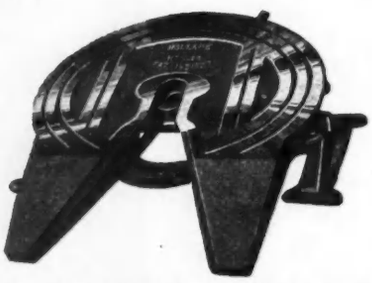


Prospective recruits are telling it to the Marines in this efficient recruiting station which serves as an office by day and a dormitory by night. The unit consists of an International COE with special body and a house-type trailer with built-in living facilities. The unit accommodates four U. S. Marinemen

HOLLAND
TRUCK and TRAILER EQUIPMENT

Assures the User Long Service Life, Maximum Safety and Complete Dependability

These are important factors to the fleet operator in these difficult days when *top hauling efficiency must be maintained* and the *conservation of equipment is vitally essential.*



Model No. 1000 Fifth Wheel — 30", 33", 36" sizes

The 5th wheel is a very necessary item of equipment to the fleet owner. Likewise the trailer landing gear is of extreme importance. The increasingly severe schedules occasioned by today's demands impose unusual and difficult service requirements on these vital items. This challenge is being met squarely by HOLLAND 5th wheels and landing gears by rendering trouble-free, continuous service day in and day out on many of the nation's leading fleets.

Why not put these advantages to work in your fleet by specifying HOLLAND on original equipment and for replacement.

Write for detailed literature describing Holland Fifth Wheels, Landing Gears and Pintle Hooks

HOLLAND HITCH COMPANY
HOLLAND — *Established 1910* — MICHIGAN

(CONTINUED FROM PAGE 136)

(3) In any program for the conservation of tires, or other scarce materials, whatever the means which may be used, those involved should avoid an effort to use the power they attain by joint action as a basis for an organized attack upon persons who do not participate in the program. The Department would be concerned about the possibilities of abuse in plans which involved any of the following administrative characteristics:

(a) Collective attack upon other groups of retailers who, in good faith, are using different devices to conserve rubber and other scarce materials. It is clear that the reduction in delivery mileage may be achieved by various means, and that the effort to achieve it by joint action should not become an excuse for private groups to coerce their competitors into using only a single method of accomplishing this result or to deny consumers the right to favor whatever method may prove to be most convenient.

(b) Procedures to secure compliance with the conservation program which result in the coercion of a business man by his competitors or in the imposition of penalties upon him by his competitors.

QUIZ ANSWERS

(CONTINUED FROM PAGE 129)

1. c. A load of post holes is correct. If you picked the "load of wind," you had plenty of company. A load of wind refers to very light freight.
2. a. An eskimo is a driver who keeps his windows open. A truck with no glass in the cab is called a "pneumonia sedan."
3. b. Bolognas. And tires that are undersized are called "rubber bands."
4. c. It's old, but it doesn't leak. If the truck did have a leaky radiator, you would say that it had a "punctured lung."
5. b. Low gear is called the "grandma hole" in truckers' slang.
6. c. I.C.C. stands for "I Can Catch" in the language of the truck driver.
7. a—2.
   b—4.
   c—3.
   d—1.
8. a. The Armstrong starter, which means a crank handle. Shaking down the ashes refers to cranking a truck by hand.
9. d. The police. A police judge is known as a "Jesse James."
10. b. Not very good at night driving.

IHC Has Big Truck Year

Truck sales of the International Harvester Co. for 1941 totaled $118,200,000 for an increase of nearly $36,000,000 over 1940. This figure represents the largest volume of all the lines manufactured by the company whose total business for the fiscal year ending Oct. 31, 1941, was $364,635,000 and which resulted in a net income to the company of $30,634,588, equivalent to $5.87 per share of common stock.

POWER

Willard Commercial Batteries are designed and built for dependable, economical service in light, medium and heavy trucks, road tractors, farm tractors, buses, and a large variety of industrial machinery. Thick, heavy plates; strong, rugged containers; ample sediment space. Exclusive Willard "Safety-Fill" construction prevents overfilling, guards against the wasteful, destructive effects of acid spray—prevents dirt from clogging vents. Complete information available upon request.

SAFETY-FILL

Willard

COMMERCIAL BATTERIES

-have the power to carry on!

WILLARD STORAGE BATTERY CO. • CLEVELAND, LOS ANGELES, DALLAS, TORONTO

EIGHT HEADS NAMED TO ODT TRANSPORT DIVISION

Organization of the Division of Motor Transport and appointments to top positions in the Division have been made public by Joseph B. Eastman, Director of Defense Transportation.

Ray G. Atherton has been appointed Associate Director, in charge of the field organization of the Division. H. Richard Stickel has been named Executive Assistant to John L. Rogers, Director of the Division.

Eight sections have been established within the Division. The sections, chiefs in charge and duties are as follows:

1. Allocation and Materials Section—H. H. Kelly.

Administration of rationing program for trucks and other commercial vehicles and motor vehicle materials, in cooperation with War Production Board.

2. Vehicle Maintenance Section—William J. Cumming.

Administration of motor vehicle maintenance program, including maintenance inspection of commercial vehicles in cooperation with inspection agencies of state governments.

3. Tire Maintenance Section—Robert D. Thomas.

Development of a program of preventive maintenance of tires and tubes.

4. Petroleum Carrier Section—Sam F. Niness.

Coordination of the transportation of petroleum products by tank trucks to assure maximum efficiency in the utilization of equipment.

5. Operations, Property Carriers — Edward J. Buhner.

Coordination of intercity trucking operations and local cartage operations to bring about maximum utlization of equipment.

6. Operations, Passenger Carriers—Robert E. Maxwell.

Coordination of services of line-haul motor buses.

7. Farm Vehicle Section — Robert A. Hicks.

Development of a program to bring about efficient utilization of farm automotive equipment.

8. Local Delivery Section—Edmund M. Brady.

Coordination of retail and consumer truck deliveries to conserve equipment through elimination of duplication and overlapping.

Mr. Atherton, Associate Director in charge of the field organization, at the time of his appointment was District Director of the Bureau of Motor Carriers of the Interstate Commerce Commission.

Mr. Stickel, Executive Assistant to Mr. Rogers, was formerly District Director of the Bureau of Motor Carriers, in charge of the district made up of Delaware, Maryland, and eastern Pennsylvania.

Following is a list of section chiefs, their assistants, and the position held by each before joining the ODT.

H. H. Kelly, of Washington, was formerly chief of the Section of Safety, Bureau of Motor Carriers, ICC.

Leon F. Banigan, of Washington, assistant to Mr. Kelly, was manager of the National Council of Private Motor Truck Owners, Inc.

William J. Cumming was formerly employed in the maintenance engineering department of the Surface Transportation Company, New York City.

Robert D. Thomas was district sales manager for the Firestone Tire and Rubber Co., with headquarters at Columbus, Ohio.

Sam F. Niness has been vice-president of the Leaman Transportation Co., Downingtown, Pa.

Edward J. Buhner, Louisville, Ky., was president of the Silver Fleet Motor Express, Inc., and partner in E. J. Buhner Co., distributors of petroleum products.

Ellis T. Longnecker, who will assist Mr. Buhner, has been District Supervisor, Bureau of Motor Carriers, ICC, with headquarters at Los Angeles, Cal.

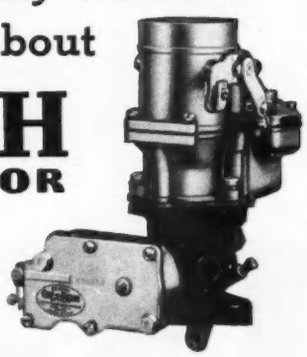
Robert E. Maxwell, Chicago, formerly was treasurer of the Greyhound Corp.

Robert A. Hicks held an executive position in an insurance firm at Cincinnati, Ohio, specializing in automotive equipment.

Edmund M. Brady, an attorney, has been engaged in general transportation practice in Detroit, Mich.

has made your present trucks almost priceless. May we send you all the facts about

ZENITH GOV·U·RETOR



This all-in-one carburetor and governor will most certainly

MAKE YOUR TRUCKS LAST MUCH LONGER

Your operating and maintenance costs will be less, and you will be protected against the dangers and expenses of speeding. *WRITE . . .*

ZENITH CARBURETOR DIVISION
BENDIX AVIATION CORPORATION
696 HART AVENUE DETROIT, MICHIGAN

READY TO TAKE OVER YOUR *BRAKING PROBLEMS* FOR THE DURATION

In these times, you can't afford to take any chances with your equipment. That's why we'd like you to meet and know Jim Asbestos, the J-M Lifesaver.

As you can see, Jim is big and tough. He stands for all the features that make Johns-Manville Brake Linings and Brake Blocks first choice with so many leading operators. He stands for the years of research and experience that make J-M Materials so tough and durable. He stands for the high quality and uniformity that the J-M name assures. Above all, he stands for better braking at lower per-mile cost to you.

So turn your braking problems over to Jim. He offers you, through J-M's free Brake Advisory Service, a tailor-made brake-lining specification for every truck in your fleet—based on your particular operating conditions. Here is one way Jim can relieve you of braking worries at a time when you've got to keep every vehicle operating at peak efficiency and economy. For details, just write Johns-Manville, 22 E. 40th St., New York, N.Y.

JOHNS-MANVILLE JM PRODUCTS

The Lifesaver of the Nation's Highways

JOHNS-MANVILLE BRAKE LINING

FLEET SAFETY RECOMMENDATIONS

Commercial vehicle accidents can be well controlled by a continuous balanced safety program. The present emergency requires special application and special emphasis of tried and proven methods. The Executive Committee of the Commercial Vehicle Section of the National Safety Council recommends immediate application of the following activities:

1. Assign the responsibility of your fleet safety program to some one person who is thoroughly trained for the job. For small fleets this may be a part-time job. Every fleet of 50 or more vehicles should have at least one full-time safety and personnel man.

2. Encourage safe driving as a patriotic duty. Emphasize the vital importance of prolonging the life of every vehicle and reducing to a minimum the consumption of gas, oil and tires. Insist that drivers maintain a reasonable speed and obey all traffic regulations.

3. Adopt the qualifications specified by the Interstate Commerce Commission as minimum requirements in your employment of new drivers.

4. Establish a driver training program for new and prospective drivers if it is difficult to obtain experienced men. If possible, drivers' helpers and other employes should be trained for future use as drivers. Have instructor-drivers ride with and instruct new drivers and those assigned to operate equipment with which they are not familiar.

5. Establish a training program for mechanics if it is difficult to obtain experienced men. If possible, mechanics' helpers should be selected for this training.

6. Salvage and recondition used and damaged vehicles and parts of vehicles.

7. Maintain employe records on accidents, complaints and compliments, arrests and results of physical examinations to aid in designing safety activities to combat the most common types of accidents and to help individual drivers by reviewing their records and giving them additional training.

8. Enter your fleet in the next annual National Fleet Safety Contest which will begin July 1, and know how your accident record compares with other fleets.

9. Recognize good safe driving records by issuing Awards. If you favor giving a bonus in addition to the award, give National Defense Bonds or Stamps instead of cash to emphasize safe driving as a patriotic service.

10. Remind your drivers of the immediate importance of safe driving. Remind them frequently. Write personal letters stressing safety and send them to the homes of drivers. Keep appropriate posters on the bulletin board. Issue special instructions covering new emergency problems.

11. Make a careful study of the routing of your vehicles to avoid driving hazards.

12. Slow down schedules of trips to compensate for present traffic congestion and hazards. Such adjustments will help also in prolonging the life of vehicles, tires and other equipment.

13. Reduce costly delays by scheduling pick-ups and deliveries to avoid traffic peaks. This cannot be done 100 per cent but much can be done which will pay for the effort.

14. Schedule use of vehicles so as to provide time for service work, inspection and repair, and thus avoid expensive breakdowns on the highway.

15. Help promote and attend regular meetings of commercial fleet operators to discuss accident problems and exchange information.

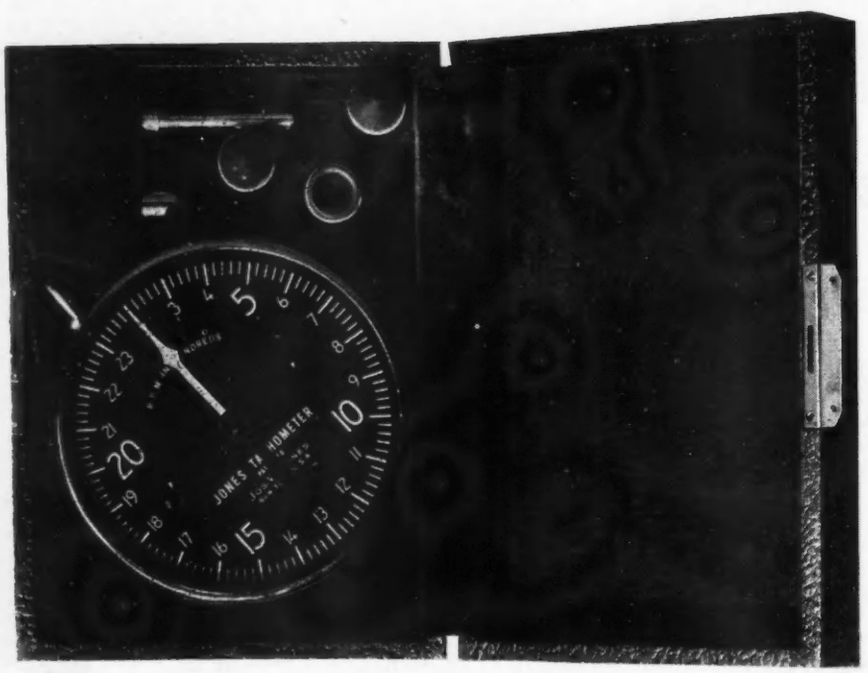
16. Encourage drivers to have periodic physical examinations and maintain good physical condition.

17. Insist that drivers obtain adequate sleep in off-duty periods in order that they may be fit and alert for driving.

18. Protect your trained personnel. Adjust your safety program to include all employes. Emphasize safety around the office, terminals, shops, docks and in loading and unloading, as well as safe driving.

19. Have some of your employes trained as First Aid Instructors. Then have these instructors train all drivers and other employes in First Aid.

The National Safety Council will gladly furnish additional information to aid in carrying out any of these activities. Address inquiries to: Fleet Engineer, National Safety Council, 20 North Wacker Drive, Chicago, Illinois.



Take Accurate Engine Readings
with the
JONES PORTABLE TACHOMETER

Used by:
Atlantic Refining Co.
Autocar Company
Brockway Trucks
Dairyman's League
International Harvester Trucks
Keeshin Motor Express
Mack Trucks
Shell Union Oil Corp.
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Standard Oil Co. of N. J.
Standard Oil Co. of La.
The White Company
Tide Water Associated Oil Co.
U. S. Army Air Corps.
U. S. Navy

. . . for instantaneous engine rpm, either from the crankshaft end, from the end of the generator, or any revolving shaft, without the use of a stop watch.

. . . for adjusting governors, for engine tune-up and carburetor adjustment, for trouble shooting in the garage or service station eliminating the necessity of road tests.

. . . for it is of portable, centrifugal type operating mechanically on contact with a wide variety of revolving objects. Speed ranges are available as follows:

100-1,200	500-2,500	350-4,000	1,000- 5,000
200-2,400	300-3,600	400-4,800	1,000-10,000

Various adaptors are supplied.

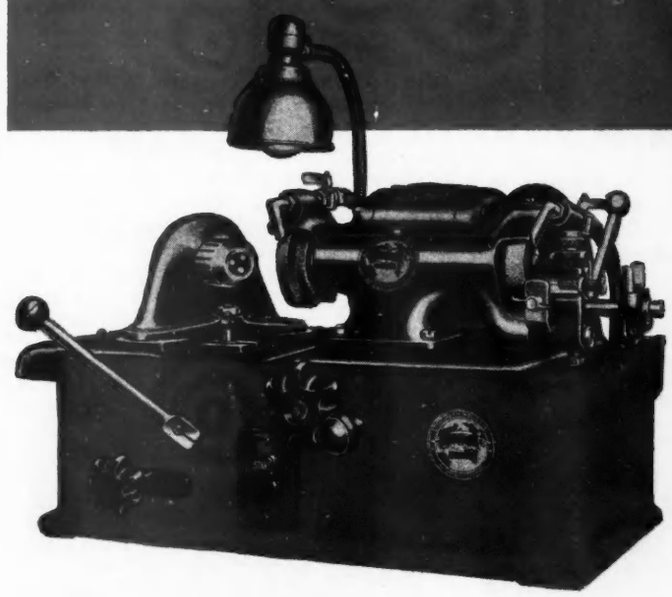
. . . for scientific maintenance that will result in better performance of your trucks individually and your fleet as a whole.

. . . for complete details, write today.

JONES-MOTROLA SALES CO.
432 Fairfield Avenue STAMFORD, CONN.

Keep ém rolling with...

SIOUX TOOLS



Ask Your Jobber's Salesman

SIOUX Perfected DUAL ACTION VALVE SEAT GRINDER with BALL BEARING HOLDER
—matches factory finish and accuracy.

SIOUX VALVE FACE GRINDING MACHINE
Built In WET GRINDER

Precision accuracy with amazing speed.
Completely equipped—ready for action!

To meet the increasing demand for motor reconditioning work with the decreasing supply of available mechanics is a "big order" for automotive shops today.

SIOUX efficiency, accuracy and speed are helping to solve this acute problem in many shops . . . by stepping up each workman's production, with actually *less* fatigue!

Go "SIOUX" all the way and you can't go wrong.

STANDARD THE WORLD OVER

ALBERTSON & CO., INC. SIOUX CITY, IOWA, U. S. A.

ATA TO DISCUSS WAR PROBLEMS AT SPRING MEET

THE annual spring meeting of the Safety and Operations Section of American Trucking Association, Inc., to be held at the Kentucky Hotel, Louisville, Ky., May 18-19-20, will be devoted entirely to current problems of the industry arising from the war emergency.

Monday, the opening day of the session will be devoted to general topics, starting off with a broad look at the general situation when John V. Lawrence, general manager of ATA talks on "Problems of Wartime Transport as ATA Sees Them." H. H. Kelly, Office of Defense Transportation, will discuss "ODT and the Trucking Industry."

Another subject assigned to Monday is "Guarding Against Sabotage in Transportation of War Materials," to be discussed by an FBI executive, and another closely akin will be "Precautions in the Transportation of Munitions."

"Conservation of Truck Equipment, Parts and Supplies" will be handled by a government official thoroughly familiar with the problem and informed of the assistance we may expect from the government.

The transportation of valuable war cargoes and highly explosive munitions, has raised a number of serious problems regarding insurance, and two talks are being arranged for Monday, one by Irvin Markel on "War Time Liability Insurance," and a second by a prominent inland marine underwriter on "Cargo Insurance and Supplies of War."

The Tuesday program will be given over almost entirely to discussion of equipment and parts, maintenance and related problems. A. Horrocks of the Goodyear Rubber Co. will discuss "What About Rubber." "Motor Fuel Rationing and Lower Octane Rating" will be discussed by a national authority on the subject. "Ignition and Carburetion as a Means of Conservation" will be discussed by Carroll A. McShane, engineer with the Electric Auto-Lite Co.

"Shop Personnel as Affected by the War" will be discussed by a prominent maintenance executive, who will talk not only on shop problems but also the enlarged program of the Motor Transport Division of the Army, which will make serious inroads in mechanical personnel shortly.

"Stepping Up Maintenance" will have an important part on the program and will be handled by one of the maintenance advisors to Coordinator Eastman.

Either an official of the U. S. Army or of the Office of Civilian Defense will discuss truck operation in blackout and air raid conditions.

On Wednesday, most of the discussion will be devoted to personnel problems. Professor Amos Neyhart, Penn State, an authority on skill tests for drivers, will discuss "Skill Tests in Driver Selection and Training" indicating many short cuts in the selection of new personnel with some degree of accuracy as to their potential safe driving ability.

"Surveying Fleet Personnel to Meet War Conditions" will be presented by Morgan B. Speir, Jr., Director of Safety, Horton Motor Lines, who has developed a lot of interesting and valuable information from the survey conducted in his own fleet which should be invaluable to other carriers in carrying out a similar survey.

The annual business meeting of the Section will be held Wednesday afternoon, May 20, when officers and directors will be elected and other business transacted.

THAT'S the story... the whole story ... of Bendix Drive.

Genuine Bendix Drive is built into an engine by the manufacturer because he is convinced *it's better to start with.*

When you finally have need to service a Bendix Drive, after long and faithful performance, by all means *stay with it;* renew worn parts with genuine Bendix Drive parts. Parts made by others for replacement purposes are very rarely as carefully made, of such precisely suitable steels, as Genuine Bendix Drive parts.

Installing unknown parts is simply not good business. It stands to reason—if the engineers considered Bendix Drive the best thing *to start with,* it's the best *to stay with!*

ECLIPSE MACHINE DIVISION
BENDIX AVIATION CORPORATION
ELMIRA, NEW YORK

BENDIX DRIVE

When the California Ice & Coal Co. added this classy-looking WA-120 White c.o.e. to its fleet, it went all the way for class and attached its name in bold, raised letters, as shown. The public will notice . . . The dump body has a 15 cu. yd. capacity and is equipped with a Heil hoist

KING BEE DOES ITS BIT

for National Defense

ITS PRODUCTS ARE EVERYWHERE IN THE FRONT LINES *and on* COMMERCIAL TRUCKS OVER ALL HIGHWAYS

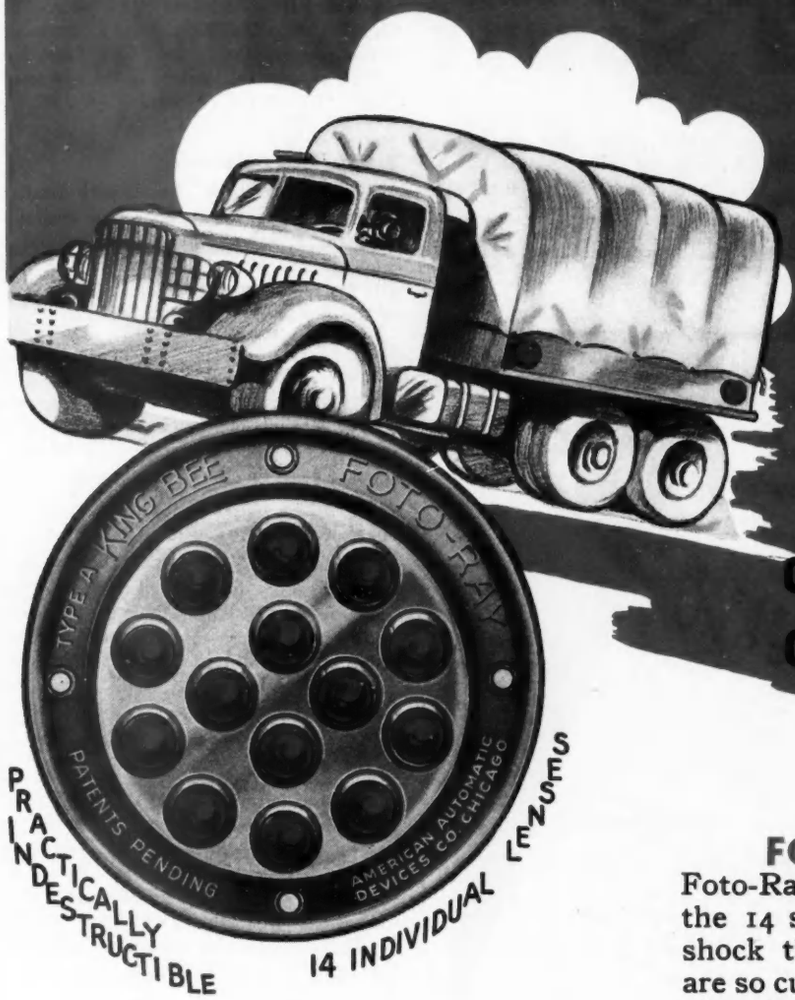


FOTO-RAY REFLECTORS

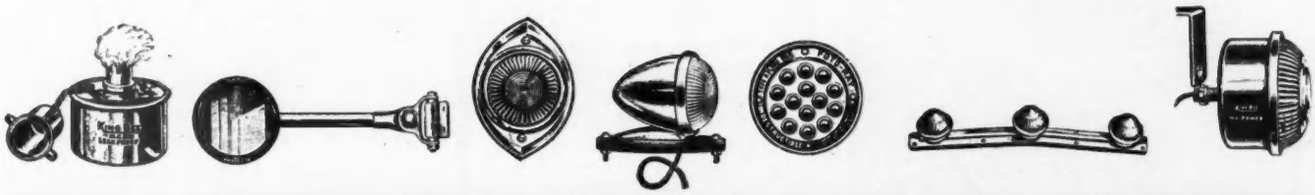
Foto-Ray Reflectors stand the gaff because the 14 spherical lenses withstand greater shock than glass in any other form and are so cushioned as to remain 100% efficient after heavy impact.

KING BEE AND PROTECTO MIRRORS

. . . complete the safety factor for drivers in mechanized divisions and in keeping open the lines of communication. They are on all defense fronts, doing their bit for an "all out" victory.

HY-POWER CLEARANCE AND MARKER LAMPS

. . . can take it, too! Hence their premier position among defense needs. They are everywhere protecting Democracy after sundown.



AMERICAN AUTOMATIC DEVICES CO.

Manufacturers of the Famous KING BEE *Products*

HARRISON, THROOP AND CONGRESS STREETS . . CHICAGO, ILL.

. . . a special selection made by the editors . . . to get your copy, just check the letter on the post card between pages 188 and 189 which corresponds with the item you desire and mail to Commercial Car Journal, Philadelphia.

K-D Tools

Twelve pages of new tools now available from the K-D Mfg. Co. This booklet contains graphic illustrations of the uses of their special tools. Check "A" on the postcard.

Blow Torch Booklet

This booklet on the care and operation of the blow torch, deals with a subject on which very little literature is available. The Clayton & Lambert Mfg. Co. has compiled in this manual many pointers and facts that will be of especial interest to the new user. Check "B" on the postcard.

Plomb Tool Catalogue

This 116-page book of tools with detailed illustrations of each item, is now available from the Plomb Tool Co. It includes a complete line of tools, boxes and kits, and will interest every mechanic. Check "C" on the postcard.

Electric Hoist

A bulletin is now available from the Wright Mfg. Co. with complete information and facts on the company's new electric hoist. Check "E" on the postcard.

Spray Equipment

Catalog No. 80, a 32-page illustrated booklet, has just been issued by the Eclipse Air Brush Co. It covers their line of spray equipment for both manual and automatic operation, in addition to their "Pneumix" air motored agitators. Check "D" on the postcard.

Brake Lining Catalog

A new catalog covering Duro Blok sets and lining in rolls. is available from the Gatke Corp. In addition, this handy book includes illustrated brake adjustment charts, size and length of lining required for various sets, and a simplified method for figuring the cost of brake lining cut from rolls. Check "F" on the postcard.

Goodyear Service Book

A timely booklet issued by the Goodyear Tire Co. which will answer all your questions regarding tire rationing for both new tires and recaps. Included is a page on timely tips and tire inspection forms for use in checking tires on your vehicles. Check "G" on the postcard.

Carburetor Manual

Now available from Bendix Products is this manual on carburetor overhaul. Drawing on their many years of study and field service for the data, this information has been "boiled down" into a simplified form. Check "H" on the postcard.

A-B-C of Vacuum Powder Brakes

In this new book Bendix has compiled data on operating and servicing vacuum power brakes. In building brakes for the millions of trucks, tractors and buses now in use, Bendix has necessarily studied the field service requirements of the industry, and data obtained from this work has been used to compile this book in a simplified form. Check "I" on the postcard.

Full Time—Top notch Truck Performance with the smallest possible outlay for maintenance costs is of vital importance to our National War Program.

Keep 'em Rolling Economically with the Weidenhoff DISTRIB-U-SCOPE

Good overall performance from your engines, so vital in these times particularly depends largely upon the condition of the ignition distributors.

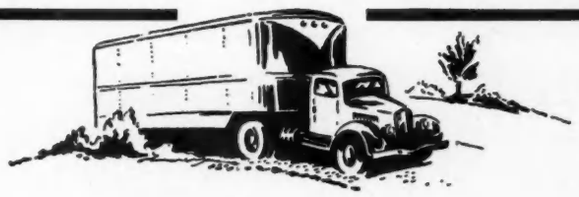
With the Weidenhoff Distrib-U-Scope you instantly get an electrical picture of what's happening inside the distributor on test. Any replacements or adjustments for point action, timing, spark advance, synchronization of double breakers, etc., are quickly shown and checked for accuracy. Then when the distributor is replaced on the engine you are sure that ignition will be at its best. Full instructions and specifications for all distributors are furnished. You can't go wrong with a Distrib-U-Scope. You'll be right all the time with it.

WRITE FOR YOUR COPY

This instructive manual on ignition distributors is yours for the asking. Have your service manager write for it.

JOSEPH WEIDENHOFF, INC., 4340-58 W. Roosevelt Road, CHICAGO, ILL.

PIERCE GOVERNORS
Make Truck Engines Last Longer!



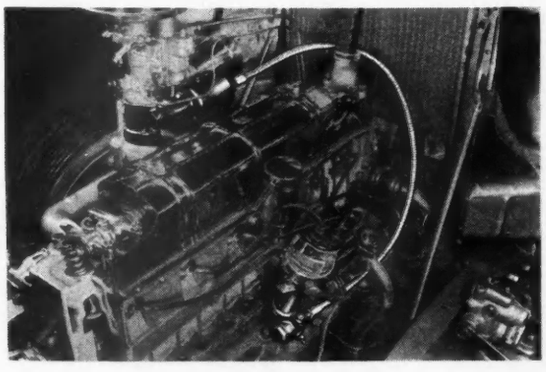
● Today—more than ever—anything which helps you get the maximum service from your equipment is vitally important. That's why more and more operators are installing Pierce Flyball Governors to protect their engines.

Pierce's time-proven flyball design provides simple, *mechanical* operation that is *positive* and unfailing, regulating speed within necessary limits. They cut in exactly when they should—there's no throttle lag—no upset carburetion—no gumming or sticking. And their sturdy, precision construction makes them outlast the engine itself!

Not only does proper governing protect engines, but it reduces operating costs substantially as shown by recent fleet surveys. Pierce engineers will be glad to tell you how you, too, can protect your equipment with Pierce Flyball Governors!

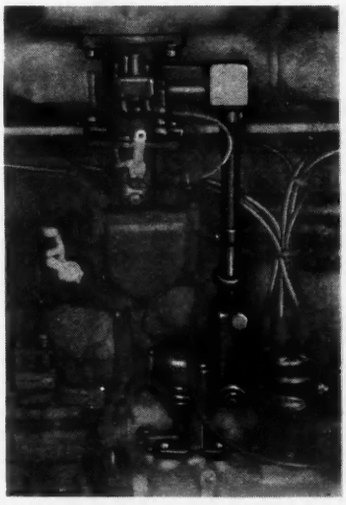
When you write, please give specific data on makes and models of equipment you use.

PIERCE GOVERNOR CO., 1611 OHIO AVENUE, ANDERSON, IND.



On this Mack engine the Pierce Governor is designed for drive from the accessory drive shaft, protecting engine against over-speeds.

In this installation the Pierce Governor is driven from the distributor, a good method of limiting road-speed on down-grades and on the level. (Required by law in several states on school buses.)



Pierce Governors

STANDARD SINCE 1913

SHOWCASE
OF NEW PRODUCTS

Luminous "Blackout" Paint

A luminous "blackout" paint, which can be applied to objects of all kinds and renders them visible in the dark, has been developed by Maas & Waldstein Co., Newark, N. J. The new paint owes its luminosity to a substance which re-radiates light, according to the manufacturer. It contains no toxic materials. After the paint has been exposed to either daylight or ordinary electric illumination for a few minutes, it glows for about 20 hours and repeats the action after re-exposure.

The new paint, which is known as Durad Luminous paint, must be used over a special primer and thinned out with a special thinner, both of which are supplied with the paint. One thick coat, or, preferably, several thin coats, of the paint produces a flat white finish suitable for indoor service. For a glossy finish, or for outdoor service, the paint is covered with a special clear topcoat. Each coat air dries in from one to four hours depending upon weather conditions.

Hydraulic Pressure Bleeder

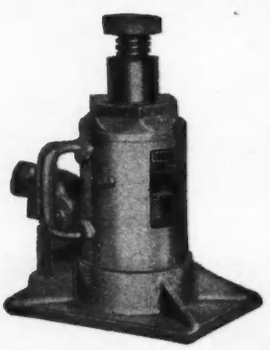
This hydraulic brake pressure bleeder and fill tank simplifies bleeding and refilling the hydraulic brake system. It bleeds and fills the system in one operation under

controlled air pressure. No pedal or lever pumping is necessary and no air can enter the system during the operation. Made of heavy pressed steel with all seams electrically welded, the tank is rust-proof. Mounted on a sturdy base with four swivel rollers, it is easy to move and hard to tip. Available with or without casters. Other features are a positive acting safety valve, air pressure gage and an automatic shut-off valve. Barrett Equipment Co., St. Louis, Mo.

Hydraulic Jacks

This 12-ton capacity hydraulic jack is designed for the tool kits of army and civilian trucks. Other models in the line include bumper-lift hydraulic jacks for passenger cars, 1½, 2, 3, 5, 8, 12 and 20-ton capacity jacks for trucks and buses, and shop service jacks of 1¼, 1½, 2, 3 and 4 tons capacity.

A catalog covering the complete line can

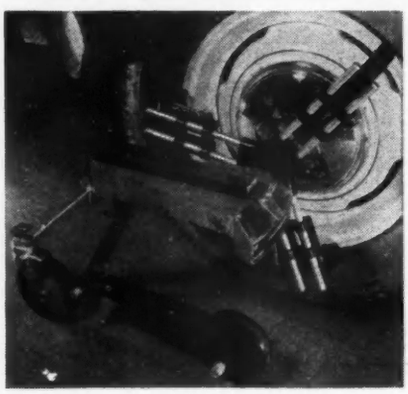


be obtained by writing the manufacturer, Hein-Werner Motor Parts Corp., Waukesha, Wisconsin.

(TURN TO PAGE 152, PLEASE)

Are You Ruining Your TIRES?

Here's How to Find Out!



Make a MICRO-LINOR TEST!

See If Your Truck Wheels Are Rolling In Line!

Check Wheel-Roll This New Way —With the Truck IN MOTION!

No longer is it necessary to depend upon a stationary check-up of wheel-roll in order to locate troubles that are causing excessive tire wear. With a Micro-Linor, you can make a test that shows exactly what is happening to your tires when the truck is traveling on the road. Differing from other types of testing devices, the Micro-Linor, by means of a "tracer wheel," performs its checking operations with the vehicle actually in motion.

LOW PRICED

Besides checking camber, caster and wheel run-out—the Micro-Linor also reveals whether wheels are out of position because of broken or mismated springs, broken center bolts, and bent axles, housings and spindles.

And it's surprisingly speedy, too, analyzing all of the most common wheel mis-alignments in less than 10 minutes, without even the use of a jack. More frequent check-ups are thus made possible without increase in manpower, so that faulty wheel-roll can be corrected before it causes serious damage to precious truck tires.

Get the low-down! Write today for complete information.

The Testing Apparatus Co., Inc.
1629 W. Fort St.
Detroit, Michigan

Free CATALOG

New TRACER WHEEL Principle

MICRO-LINOR
The New "Tracer-Wheel" Principle

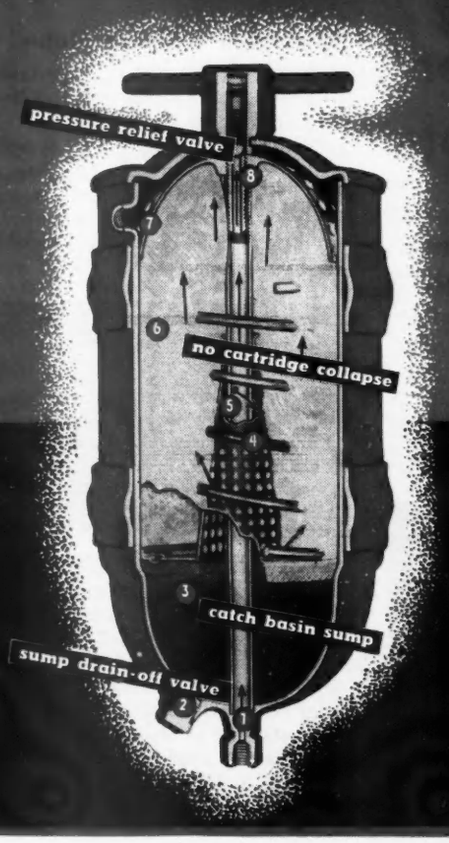
Vital to Victory Conservation of Oil and Engines Because

Cleansed Oil Prevents Piston Failures Like This:

This photograph of a piston clearly shows the damage that can be done when dirt, abrasives, carbon and sludge are present in lubricating oil.

Note the deposits of carbon and sludge on the walls of the piston. Look closely and you will see the vertical wear lines running up and down the sides of the piston. These encrustations are abrasive in action, and score and scuff the cylinder wall, as well as the piston.

Note also that carbon deposits have practically "frozen" the top ring, and the other rings are sufficiently clogged to cause wasteful oil pumping, compression loss, blow-by.



There can be no sludge, carbon, metal particles and dirt to cause piston failure, in oil that is being *continually cleansed* by a DeLuxe Oil Filter. The marked leadership which DeLuxe has taken in the fleet, diesel and industrial fields, is due to the increasing recognition of this essential difference:—*DeLuxe is the one filter that does not merely strain or filter oil—but completely and continuously cleanses it.* Reason:—only DeLuxe embodies all eight construction features essential to this cleansing action. For complete information write DeLuxe Products Corp., 1406 Lake St., La Porte, Indiana. *Canadian Address:* 364-70 Richmond Street, W., Toronto, Ontario, Canada.

DELUXE OIL FILTER

Does More Than Strain Oil . . . More Than Filter Oil

NEW PRODUCTS

(CONTINUED FROM PAGE 150)

Pedrick Adds to Line

In its new 1942 price catalog, the Wilkening Mfg. Co. of Philadelphia and Toronto lists new engineered sets of Pedrick piston rings. Most important are the 25 new sets primarily for use in farm tractors, and the new sets for heavy-duty trucks and bus engines.

Among the 140 sets primarily for truck and bus engines are those for Autocar, Cummins Diesel, GMC, Hall-Scott, Hercules, IHC, Mack, Waukesha and White. One of the sets engineered for diesel engines is E273 for GMC 71 engine, containing special grooved and tinned compression rings and Pedrick hydraulic oil rings similar to GMC original equipment.

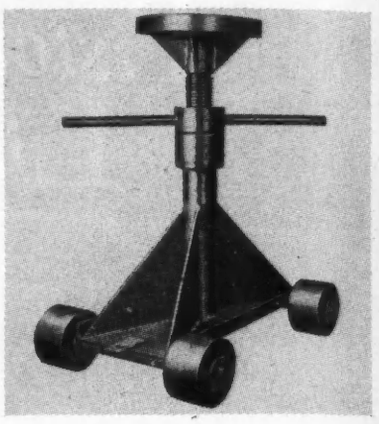
Adjustable Nut Wrench

By flashing the handle band up or down on the handle shaft, it is possible to make quick adjustments to any size nut with this special wrench. The jaws are self-locking and cannot slip because of their construction. The wrench is available in nut and pipe types and in four different sizes. It is manufactured by the Pack-Rie Machine Corp., 828 N. B'way, Milwaukee, Wisc.

Semi-Trailer Jack

Fleetmen will welcome news of this new type semi-trailer jack. A sturdy movable unit which can be adjusted to meet any type of ground condition and trailer design. One of these jacks could safely carry the front end of a loaded trailer as they are designed for a capacity of 10 tons.

The base and wheels are of steel con-



struction and the extension screw is of steel tubing. It has a minimum height of 31½ in. and a maximum of 46½ in. Total weight is 178 lb. and price is $85.00. Full details from Templeton, Kenly & Co., 1020 S. Central Ave., Chicago, Ill.

Cannon Cleaners

The Cannon Chemical Co., Inc., 210 Broadway, Everett, Mass., has added a new cleaner known as "Dirtbuster" to its present "Rustbuster" line of cleaning compounds. While the latter is designed specifically for cooling systems, the new "Dirtbuster" is for upholstery and body cleaning.

Hydraulic Cylinder Hone

A new universal hydraulic cylinder hone has been designed to hone all hydraulic master and wheel cylinders from 15/16 in. I.D. to 11½ in. I.D. without removing cylinders from the wheel. The hone adjusts itself to any cylinder diameter automatically and is operated by any electric drill from ¼ in. size up. It has a flexible shaft so that cylinders can be honed accurately

without having the drill perfectly lined up with the cylinder.

The grinding mechanism consists of three stones so mounted that, when the hone is revolved, centrifugal force throws them against the cylinder wall. The stone alignment prevents out-of-round honing and each stone is pivoted at each end to prevent chatter. Available from Thermoid Co., Trenton, N. J.

(TURN TO PAGE 154, PLEASE)

NO ACCIDENTAL UNCOUPLING!

PLAY SAFE — AVOID DELAY WITH THE:

A-S-F FIFTH WHEEL

AMERICAN STEEL FOUNDRIES

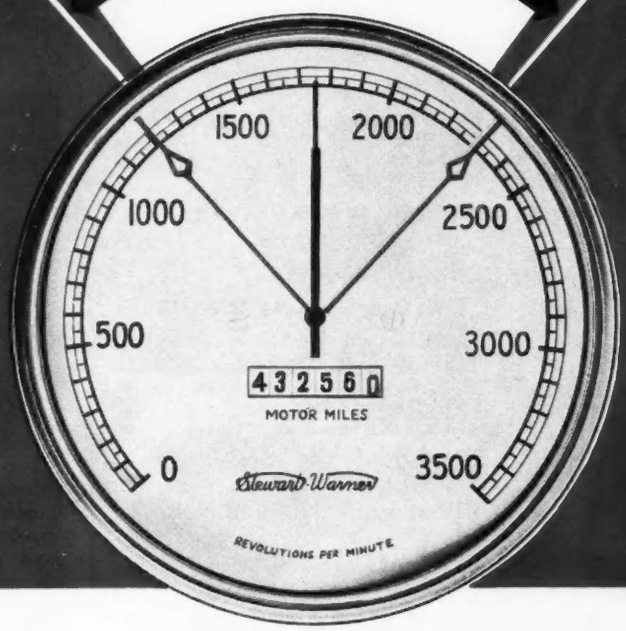
EAST CHICAGO . . . INDIANA

EXTRAVAGANCE IS WASTE . . .
AND WASTE POSTPONES VICTORY!

HELP TO HASTEN VICTORY BY OPERATING YOUR TRUCKS IN . . .

THE ECONOMY RANGE

DANGER!
BELOW
THE ECONOMY RANGE YOU WASTE FUEL —SHORTEN MOTOR LIFE!



DANGER!
ABOVE
THE ECONOMY RANGE YOU WASTE FUEL —SHORTEN MOTOR LIFE!

Stewart-Warner Motor-Mile Tachometers Cut Fuel, Maintenance Costs 25% or More!

EVERY TRUCK has its own "economy range" —the range of motor speeds above or below which it operates extravagantly. Motor fuel is needed by our armed forces. To conserve fuel is to aid the war program—to help hasten the day of victory!

Make it easy for *your* drivers to operate your trucks within the economy range—and share the fuel savings reported by other users of Stewart-Warner Motor-Mile Tachometers—often 25% or more! And maintenance costs are often cut by 25% or more—when trucks are serviced on a basis of *"motor miles"* instead of road miles!

The Stewart-Warner Motor-Mile Tachometer shows the exact limits of the economy range by stationary red pointers. The driver needs only to keep the black pointer between these limits! And *motor miles* are recorded whenever the motor runs, even though the truck be standing still. Use that record as the basis for service, and you guard gears and bearings which may be hard to replace! *Write today for details!*

Another Product of STEWART WARNER

STEWART-WARNER

MOTOR-MILE TACHOMETER

STEWART-WARNER CORPORATION • 1876 DIVERSEY PARKWAY • CHICAGO, ILLINOIS

NEW PRODUCTS

(CONTINUED FROM PAGE 152)

Plastic Reflector Discs

Plastic discs about the size of a nickel, which are said to give "maximum reflection of light from minimum candle power," are now available from the Lumelite Corp., New York City.

Reflecting sharply the light from a "blackout" colored flashlight or similar shaded source, the discs are made wholly of "Lucite" methyl methacrylate resin, and each disc has a hole in the center, so that it can be nailed, riveted, screwed or wired in place almost anywhere.

Available in crystal, amber, red and green, they are designed for name, roadway and advertising signs, markers and for moving vehicles. A sign on the side of a truck made from these discs, for example, would serve the double purpose of warning a motorist approaching the truck at right angles at a crossroad and of advertising the truck's owner.

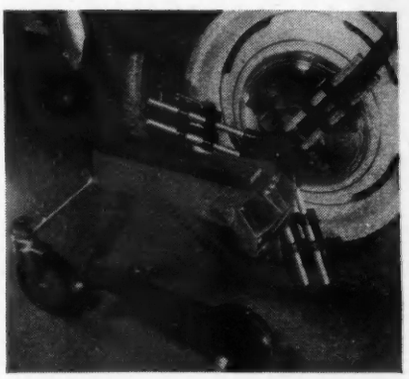
Tire Branding Outfit

This electrically heated tire branding torch is offered by the Master Mfg. Co., 1400-16 W. Fulton St., Chicago, Ill. A light hand operated unit, this torch is available with different size faces accommodating from three to seven ½-in. letters. The letters are set or quickly changed by means of a single adjustment screw on the side of the torch. The heating element is a replaceable coil of insulated and baked nichrome wire.

Micro-Linor for Trucks

A new model of the "Micro-Linor," a testing instrument which discloses at a glance whether or not a wheel is rolling in line, has recently been designed for motor trucks by the Testing Apparatus Co., Detroit, Mich.

In addition to checking camber, caster and wheel run-out, the Micro-Linor reveals whether wheels are out of position because of broken or mismated springs, broken



center bolts, and bent axles, housings and spindles. It does this not only for front wheels, but also for every wheel on both truck and trailer. The Micro-Linor tests wheel-roll with the truck actually in motion, thus disclosing exactly what is happening when the truck is traveling on the road. This unique method of testing is achieved by means of a "tracer wheel" which runs alongside of the truck wheel, recording on the instrument's dial the degree of misdirection of the truck wheel.

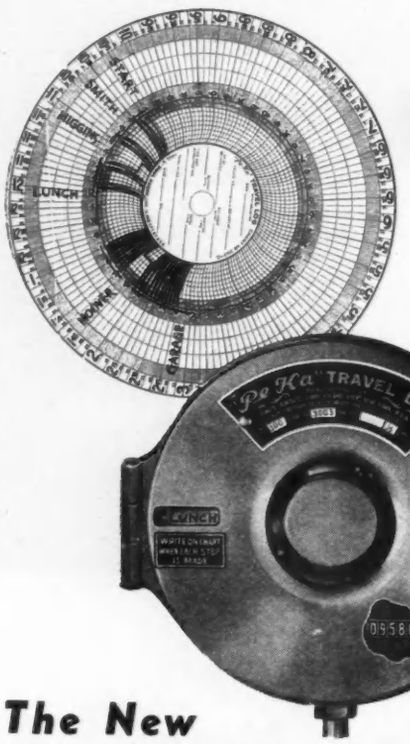
This new device shortens the time formerly required in testing a wheel for both alignment and wheel-roll. It analyzes the effect of the most common misalignments and permits routine tests without the use of a jack.

Sweeping Compound Removes Oil

Carey grease ball asbestos sweeping compound removes oil and grease deposits from floors and driveways. This compound contains no acids or caustics and will not cause erosion. It eliminates the danger of slipping and fire hazard due to oil and grease accumulations.

The compound is readily applied by sprinkling it on the deposit. Heavy grease may first require soaking with kerosene. Scrubbing with a broom causes absorption of the oil and grease which can then be swept away. A further advantage of this compound is that it can be re-used until thoroughly soaked. It is manufactured by The Philip Carey Mfg. Co., Cincinnati, Ohio, and is available in 50-lb. bags.

(TURN TO PAGE 156, PLEASE)



KNOW THE FACTS

About the daily run of each truck in your fleet.

There are no arguments when

The New "PeKa" TRAVEL LOG TELLS ALL!

The driver and the truck tell the whole story. When the truck stops the driver writes, and when the truck is in motion the TRAVEL LOG records on the disk.

The "PeKa" Travel Log was developed at the request of large fleet owners. With the "PeKa" the slowing down of a vehicle especially on its return trip, lateness in the morning, an extra long lunch period, unnecessary stops or any other irregularities are immediately noticed on the chart.

Furnished in 12-24-72 hours recording. Guaranteed for one year.

Let us also tell you about our Dash Board Odometer, Hubodometer, Tachometer and Counters. Write TODAY.

Some of the Facts Recorded by the "PeKa" TRAVEL LOG

- Time of start and finish of daily run.
- Actual time of deliveries.
- Distance traveled between each stop.
- Number of stops and their duration.
- Average speed.
- Total number of miles covered.
- Motor Hours

PAUL KNOPF 41-43 37th Street LONG ISLAND CITY, N.Y.

Let a Meehanite Foundry Solve Your Casting Problems

Ansonia, Conn.
Farrel-Birmingham Co., Inc.

Bridgewater, Mass.
The Henry Perkins Co.

Buffalo, N. Y.
Pohlman Foundry Co., Inc.

Charleston, W. Va.
Kanawha Manufacturing Co.

Chattanooga, Tenn.
Ross-Meehan Foundries

Chicago, Ill.
Greenlee Foundry Company

Cincinnati, Ohio
Cincinnati Grinders Incorporated

Cincinnati, Ohio
The Cincinnati Milling Machine Co.

Cleveland, Ohio
Fulton Foundry & Machine Co.

Denver, Colo.
The Stearns-Roger Mfg. Co.

Detroit, Mich.
Atlas Foundry Co.

Flint, Mich.
General Foundry & Mfg. Company

Hamilton, Ohio
The Hamilton Foundry & Machine Co.

Irvington, N. J.
Barnett Foundry & Machine Co.

Los Angeles, Calif.
Kinney Iron Works

Milwaukee, Wis.
Koehring Company

Mt. Vernon, O., Grove City, Pa.
Cooper-Bessemer Corporation

New York, N. Y.
The American Brake Shoe & Foundry Co.

Oakland, Calif.
Vulcan Foundry Company

Orillia, Canada
E. Long, Ltd.

Philadelphia & Bethayres, Pa.
H. W. Butterworth & Sons Co.

Philadelphia, Pa.
Florence Pipe Foundry & Machine Co.,
(R. D. Wood Company, Selling Agents)

Phillipsburg, N. J.
Warren Foundry & Pipe Corp.

Pittsburgh, Pa.
Meehanite Metal Corporation

Pittsburgh, Pa.
Rossdale Foundry & Machine Co.

Rochester, N. Y.
American Laundry Machinery Co.

St. Louis, Mo.
Banner Iron Works

St. Paul, Minn.
Valley Iron Works

London, Eng.
The International Meehanite Metal Co., Ltd.

Waterloo, N. S. W.
Australian Meehanite Metal Co., Ltd.

Johannesburg, South Africa
Meehanite Metal Co. (S.A.) (Pty.) Ltd.

POWER TO STOP THIS SCOUT CAR

U.S. Army Half-Track Scout Car built by The White Motor Company, equipped with MEEHANITE Brake Drums.

Front driving axle made for above Scout Car by Timken-Detroit Axle Co., and equipped with MEEHANITE Brake Drums (below).

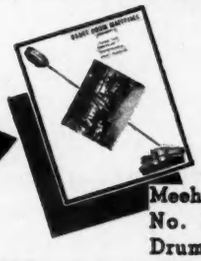
IS ENTRUSTED TO MEEHANITE BRAKE DRUMS

In this Army unit, MEEHANITE METAL fulfills the strict requirements of an exacting job.

The smooth, safe operation of any vehicle depends on good brake drums. Operators find that MEEHANITE drums provide greater heat resistance, tough wearing qualities and longer lining life.

MEEHANITE offers a combination of characteristics that makes it unique among cast metals, and furnishes the very qualities demanded for brake drum service. This special metallurgically controlled metal is highly resistant to abrasion yet, due to its structure, provides a smooth braking action which means longer lining and drum life. Its rigidity resists distortion and its graphitic structure provides just enough lubrication to permit smooth braking action, reducing the tendency to scoring.

MEEHANITE
SEND FOR BOOKLET



Meehanite Bulletin No. 13, "Brake Drum Materials."

MEEHANITE RESEARCH INSTITUTE, 311 Ross Street, Pittsburgh, Pa.

NEW PRODUCTS

(CONTINUED FROM PAGE 154)

Wheel Nut Lock Cap

The No. 421 wheel nut locking caps provide a safety factor against wheel removals and tire thefts. Wheels cannot be easily removed without a special key. The cap weighs only two ounces, hence does not materially affect wheel balance at normal speeds. Fits all popular cars. Made of steel, cadmium plated; set of five to box. This new item has been added to the line of Champ-Items, Inc., 6191 Maple Ave., St. Louis, Mo.

Oil Refiner for Trucks

The Crane oil refiner for truck and industrial engines is available in various sizes. The truck engine unit is easily installed and insures clean oil to the engine by removal of destructive non-lubricants liberated from the oil by engine action. The manufacturer claims that the crane filter not only removes particles of non-lubricants but also handles the lacquers, sediments and acidity developed by engine heat and wear.

The purification medium used in this filter is known as cranite. This substance is available in a separate container. A portion of cranite is placed in the cloth bag which is a part of the refiner. In use, the cranite serves to remove acid from the oil and is quickly replaced, periodically, by a new supply of the element. Honan-Crane Corp., Lebanon, Ind.

New Auto Alarm

The "Gardsall," a new and timely product, has been announced by the Knight-Morley Corp., Detroit, Mich. This new unit starts the horn blowing intermittently and keeps it blowing for 15 seconds after the car has been molested. The "Gardsall"

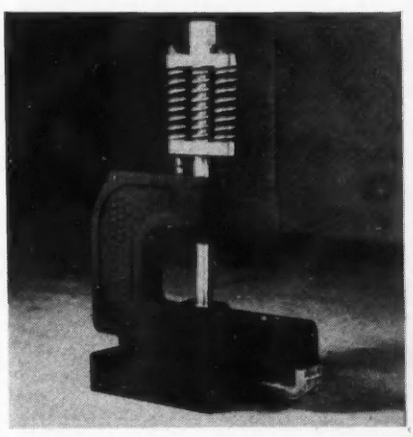
is equipped with a sensitivity selector enabling the operator to adjust for the number of times the horn will blow and the shock required to start it blowing.

The alarm comes equipped with a switch which enables the operator to turn the alarm off while the car is in use. Installation can be accomplished in a few minutes.

Punch and Die Holder

A new line of Wales punch and die holders is announced by Strippit Corp., Buffalo, N. Y. These compact models punch 3/16-in. maximum holes on a minimum center to center distance of 5/8 in. with shut height of 6¼ in.

"Selective Stripping," an exclusive development, provides three instantly removable and interchangeable springs for a stripper selection of one, two or three spring tension to custom fit the exact stripping action required by various gages and types of metals. In addition, nothing is attached to the ram of the press. Each individual unit may be reset or removed from the rail quickly. Free floating punches may be lifted out of their guides instantly. Even the punches, guides and springs may be removed from holders instantly. Wales hole punching holders, dies and punches are available in a wide range of standard and special sizes, capacities and models.



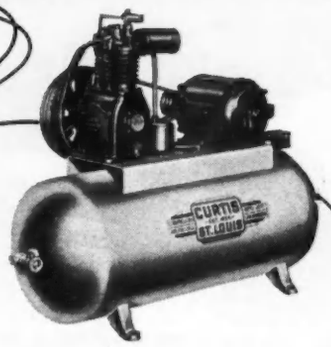
(TURN TO PAGE 158, PLEASE)

Maintenance Is All-Important Today!

Cut Costs, Do Better, Faster Work With

CURTIS EQUIPMENT

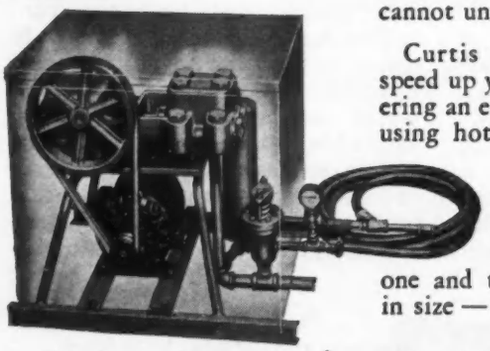
Curtis AIR COMPRESSORS



Your compressor is the power plant on which many vital maintenance operations depend. That's why so many fleet owners depend on Curtis Air Compressors to assure an ample supply of dependable, low-cost air.

Today, your equipment must last longer than ever before—and Curtis Air Compressors provide economical, trouble-free service through an exceptionally long life. They'll stay on the job day after day, delivering the finest type of performance in the heaviest duty service.

Curtis CAR WASHERS



When the life of your fleet depends upon proper care and maintenance, Curtis Hydraulic Car Washers will disclose many needed under-car repairs that hand washing cannot uncover.

Curtis Hydraulic Car Washers speed up your wash jobs, too, delivering an even, fast, powerful stream, using hot or cold water solutions.

Features include Timken Bearings, silent V-belt drive, double acting slow speed pump—four sizes, one and two gun types — compact in size — protective metal cover.

For faster, better servicing, reduced fleet maintenance costs, write for complete information on Curtis Air Powered Equipment.

CURTIS PNEUMATIC MACHINERY DIVISION
of Curtis Manufacturing Company
1970 Kienlen Avenue St. Louis, Missouri

YOUR MILEAGE HAS BECOME YOUR WAR EFFORT

You owe America every possible mile from every truck in your fleet. Increased and uninterrupted mileage is just as important to the nation's Victory as to your own profit. Step up your mileage record with the Grey-Rock 3-POINT PLAN* of brake service. It reduces "time out" for repairs. It cuts mechanics' time by eliminating experiments and cutting down mistakes. It keeps trucks rolling extra miles under heavier loads. Call your jobber about Grey-Rock's 3-Point Plan, or write United States Asbestos Division of Raybestos-Manhattan, Inc., Manheim, Pa.

NOW . . . MORE THAN EVER . . .
DEPEND ON

Grey-Rock

BALANCED BRAKE LININGS

BLOCKS • CLUTCH FACINGS • FAN BELTS • HOSE

* **STEP UP YOUR SCHEDULES WITH GREY-ROCK'S 3-POINT PLAN**

NATIONAL SAFETY COUNCIL STANDARDS —quickest, surest, safest check on brake inspection, adjustment and reline jobs.

GREY-ROCK ENGINEERING METHODS—the expert way to do good brake jobs faster and better. Every brake is diagrammed in the big Grey-Rock Service Guide.

GREY-ROCK BALANCED BLOCKS are the correct nationally-advertised linings worthy of good service. Famous Vee-Lok Clutch Facings are best for every vehicle.

NEW PRODUCTS

(CONTINUED FROM PAGE 156)

Shock Absorber Wrench

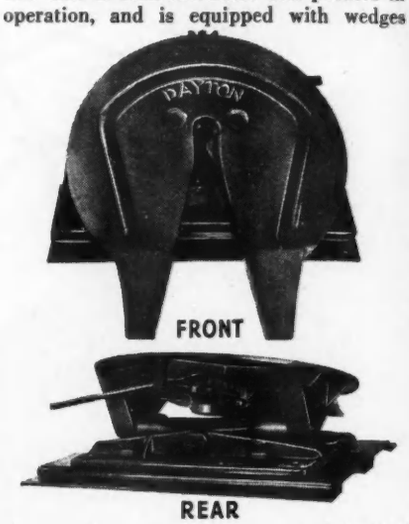
This wrench is designed for use on airplane type shocks. The ground tips fit into the slots of the rod-guide, for easy removal of the guide nut. This tool is a one-piece drop forging of vanadium steel and will last indefinitely. It is offered separately or as part of a Kit which also contains a graduated measuring glass and a threaded funnel for gauging the quantity of fluid used. Each kit carries a complete filling chart. Hygrade Products Co., Inc., 35-35 35th St., Long Island City, N. Y.

Barrett Bearing Packer

The Barrett Equipment Co., St. Louis, Mo., is offering a complete line of hand or air pressure operated bearing pack-Model B-514 bearing packer is particularly adapted for truck work, having a range from small bearings up to bearings as large as 9½ in. Sizes are available to meet requirements of every shop.

Fifth Wheel

A new universal fifth wheel for trailers has been designed by the U. S. Quartermaster Corps, and is now being produced by the Dayton Steel and Foundry Co., Dayton, Ohio. Cast from electric furnace steel, this unit is semi-automatic and positive in operation, and is equipped with wedges



for use in converting from an individual to a universal fifth wheel. A device which holds the jaws open, allows one man to draw out the king pin, and the jaws are reset for coupling again as the pin is withdrawn.

Wheel Alignment Equipment

This equipment especially designed by the Snap-on Mfg. Corp., Kenosha, Wis., for use in small shops where floor space does not allow the installation of permanently installed equipment, consists of three units for complete front end alignment. The set of two camber-caster protractors, one for each wheel, have special type clamps for quick fastening to the wheels and a ball bearing mounted pendulum for free swinging action.

The toe-in trammel bar is the sliding gauge type which adapts itself to different wheelbase widths. Measurements are read directly on an adjustable gauge dial.

The third unit is an angle gauge which is used with the trammel bar to set the wheels to correct angles for properly reading the steering geometry degrees. The manufacturer has prepared a film showing how the equipment is used.

Dash Panel Clamp

The "Flex-O-Grip" clamp can be fastened to all formations of dash panels. It holds securely, eliminates wobble and is simply attached by tightening a screw at the bottom of the clamp.

Man-Of-The-Hour Department

Guy Rawls, Assistant State Rationing Administrator, recently received this inquiry from a county board:

"Can a tire retreader continue unrestricted operation, if he retreads tires without using any rubber?"

Mr. Rawls reported with this wire:

"Can you get dealer to share his secret? That's the very fellow the Government needs right now."

JOYCE LIFTS give the *alert* signal

Now more than ever, you must shift tires, inspect brakes and check underbody mechanism frequently. You have a big maintenance job to do . . . and Joyce Lifts will help you do it.

The BES Series of Joyce Two-Post Hydraulic Lifts make it possible for one lift to do double duty. One piston is fitted with a special superstructure, its length varying according to your requirements. The other piston has the Joyce standard 5 ft. superstructure.

This Lift will accommodate motor vehicles of all types and lengths . . . heavy trucks over two pistons; passenger cars and light trucks on the single piston with special superstructure. Spotting is made easy. Your trucks are on and off quickly.

Joyce Lifts are famed for their modern design, the strength of materials used, and their trouble-free operation. Most trucking operations are entitled to priorities on Lifts. Look ahead, anticipate your needs and get in touch with us for complete details, specifications and prices.

THE JOYCE-CRIDLAND COMPANY
DAYTON, OHIO

Posed by BILLIE and CINDER

"ACID-PROOF" *is essential to life in* BEARINGS TOO!

New! Exclusive! Already in thousands of Diesel and heavy-duty gas engines these sensational ACID PROOF Aviation Type copper alloy bearings are preventing failure due to corrosion and greatly increasing resistance to fatigue.

The high bearing pressures and operating temperatures of modern engines demanded this great advance in bearing design and Ring-True produced it!

Learn the complete facts today—and remember—ACID PROOF Aviation Type copper alloy bearings are *exclusive* with Ring-True.

Write us today or ask your jobber.

Genuine **RING-TRUE BEARINGS**

ACID PROOF bearings have a dull, even-toned surface, as illustrated, in contrast to the mirror-like surface of babbitt lined bearings.

RING-TRUE BEARINGS C&B

Complete Motor Bearing and Connecting Rod Service

CLAWSON & BALS, INC., Chicago

Factory Stocks in Principal Cities

NEWSCAST

(CONTINUED FROM PAGE 82)

OPA Changes Rule to Release Frozen Retreads

The Office of Price Administration has announced a change in the rules regarding release of retreaded tires. An eligible vehicle operator who wishes to regain possession of a truck tire that has been retreaded but is at the present frozen in the retreading shop, may apply to the local rationing board for a retread certificate without presenting an inspectors report.

This is the first of a series of ceremonies being held by the Continental Baking Co. in which 319 driver-salesmen are being awarded Hamilton watches for 10 years of safe driving between 1932 and 1942. This one is in New York

It takes power, stamina and ruggedness for hydraulic dump bodies to do continuously the rough, abusive work required on today's high speed preparedness jobs. » »

THE GALION ALLSTEEL BODY COMPANY, GALION, OHIO, U. S. A.

ODT Suggests Plan to Curb Milk Deliveries

An official investigation by the Office of Defense Transportation has disclosed that milk delivery equipment could be conserved by the following method: (1) Establishment of every-other-day retail deliveries; (2) restriction of deliveries to daylight hours, beginning not earlier than 7 a.m., in order to eliminate "call-backs" to make collections or for other purposes; (3) elimination of special deliveries, retail and wholesale; and (4) elimination of Sunday wholesale deliveries, except to hospitals and to the armed forces.

GM Inaugurates Three-Point Program to Aid War Effort

General Motors has recently taken on a new war assignment beyond the scope of its present huge production effort. This assignment incorporates a three point program to help keep the planes and tanks and guns of the United Nations at highest possible fighting efficiency. The three points are:

1. Help train the enormous number of mechanics required to keep a modern tank force in motion by maintaining schools for Army and Navy instructors.
2. Place its own engineers in the field to expedite reports on operating experience so that its war products can be improved constantly.
3. Assist the Army and Navy in having replacement parts on the spot when needed.

Canadian Truck Route Proposed

A trans-Canada trucking route that would save from a day to a day-and-a-half on truck shipments between the upper midwest and East coast ports has been proposed by Detroit officials. The purpose of the "right-of-way" is to relieve the present bottleneck existing in shipment of war materials.

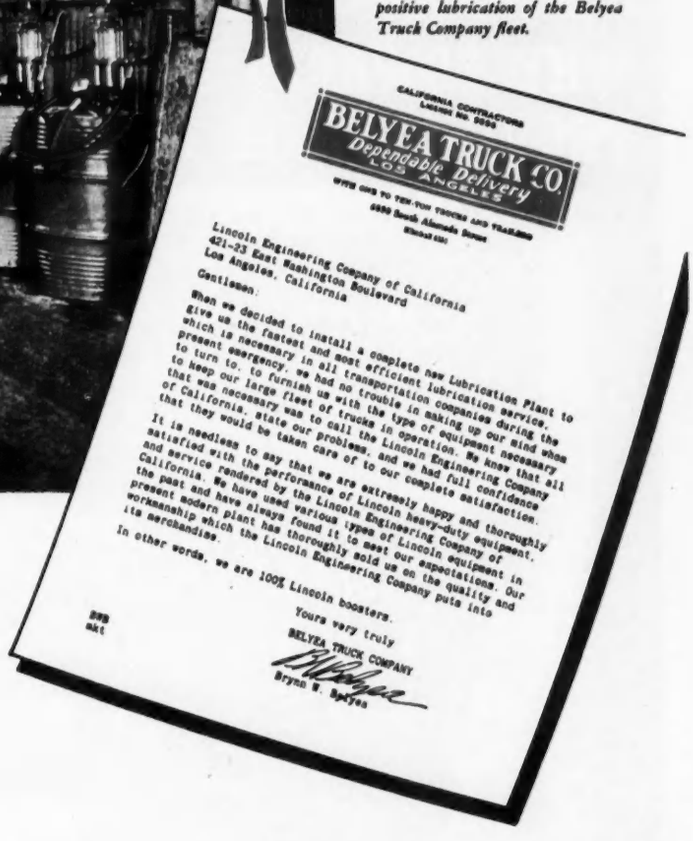
Timken Film on Axle Service

A sound film in color is being used by the Timken-Detroit Axle Co. to present to truck and bus fleet operators its new 4-point axle maintenance program. Operators viewing the film will see the actual performance of recommended methods for keeping axle equipment "in the pink" and forestalling delays and breakdowns. The film incorporates the results of years of testing and research into the cause and effects of failures and the methods service men follow in preventing them.

(TURN TO PAGE 162, PLEASE)

LINCOLN Lubricating Equipment
gives the service needed during this emergency

The six Lincoln Heavy-Duty Lubriguns, pumping lubricant direct from 400-lb. refinery drums furnish fast, positive lubrication of the Belyea Truck Company fleet.



BELYEA TRUCK CO.
Dependable Delivery
LOS ANGELES

Lincoln Engineering Company of California
421-23 East Washington Boulevard
Los Angeles, California

Gentlemen:

When we decided to install a complete new Lubrication Plant to give us the fastest and most efficient lubrication service, which is necessary in all transportation companies during the present emergency, we had no trouble in making up our mind when to turn to, to furnish us with the type of equipment necessary to keep our large fleet of trucks in operation. We knew that all that was necessary was to call the Lincoln Engineering Company of California, state our problems, and we had full confidence that they would be taken care of to our complete satisfaction.

It is needless to say that we are extremely happy and thoroughly satisfied with the performance of Lincoln heavy-duty equipment and service rendered by the Lincoln Engineering Company of California. We have used various types of Lincoln equipment in the past and have always found it to meet our expectations. Our present modern plant has thoroughly sold us on the quality and workmanship which the Lincoln Engineering Company puts into its merchandise.

In other words, we are 100% Lincoln boosters.

Yours very truly
BELYEA TRUCK COMPANY
Brynn W. Belyea

BWB
AKT

Proper Lubrication keeps Belyea trucks free from needless bearing failure

★ ★ ★

"Keep 'em Rolling" is the order of the day and wise motor transport operators like Belyea know that proper lubrication is essential if vehicles are to stay on the highway and out of the repair shop.

Our nation has sounded the call and Lincoln Lubricating Equipment has answered and is doing its part in keeping the nation's rolling stock in "top shape" so that "Victory" workers and materials, so necessary to win this war, can be moved without delay.

The letter, reproduced above, speaks for itself. Our engineers can help you too and welcome the opportunity to make recommendation.

Consult Your Lincoln Jobber or write us for Complete Information

A42-1

(Purchase and sale of Lincoln equipment is of course subject to war-time regulations as issued from time to time by the government.)

LINCOLN ENGINEERING COMPANY

Pioneer Builders of Engineered Lubricating Equipment

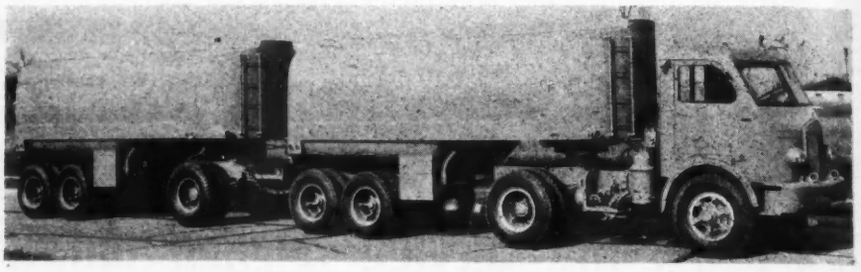
ST. LOUIS, MO., U. S. A.

NEWSCAST

(CONTINUED FROM PAGE 160)

Kentucky Lists Highways Open to 28,000 lb. Loads

An official order has been issued by the Kentucky Commissioner of Highways which lists roads over which 28,000 lb. trucks and 33-ft. tractor-semi-trailers may operate under terms of the newly approved law stepping-up size and weights in Kentucky from now until end of war emergency. Four cross-state roads are open to the new limits: U. S. 51; U. S. 45; U. S. 41; U. S. 41E and U. S. 41W; U S. 31W and U. S. 68; U. S. 31E.



This 10,400-gal. Heil-built tank truck is operated by Refiners Transport and Terminal Corp., Detroit. Five of these units in daily operation each hauled 30,790 gal. of fuel in a 14-hour day. In 26 days operation the five units covered 21,761 miles and hauled 4,002,800 gal. The tractor is a White c. o. e. unit

WHY EDWARDS TRAILERS ARE PROVING THEIR METTLE NOW

THIS war is making exacting demands on the haulage equipment that is a valuable cog in America's all-out will to win. And Edwards Trailers are really proving their mettle.

No wonder. For Edwards Trailers are designed and built with ability to carry payloads beyond the limits ordinarily imposed in normal times. Such an extra margin of ability is worth much at any time—more in these.

DEALERS!
INCREASE YOUR SALES VOLUME

Edwards Trailers today offer an opportunity to recover a good part of your sales volume. Now is also the time to really establish yourself permanently in the field. Your present equipment is all that is necessary to service Edwards Trailers. Attractive proposition. Write or wire today.

EDWARDS SEMI-TRAILERS
Meet Present-Day Demands
EDWARDS IRON WORKS, INC., SOUTH BEND, IND.

Washington Cooking New Tire Disposal Plan

It is reported from Washington that a new plan will be announced under which tire dealers and jobbers may dispose of their stocks to original manufacturers or mass distributors at cost plus 10 per cent. The plan will require manufacturers and distributors to sell all but a certain part of new tire and tube inventories to the government for distribution by Defense Supplies Corporation, R.F.C. subsidiary. Truck tires and tubes are not included in this plan because they are said to be moving rapidly enough under the rationing program to relieve dealers of any great burden in carrying stocks.

Court Rules 1937 Weight Tax Legal

The motor vehicle weight tax, as enacted by 1937 law is still in full force and effect in Indiana according to a court ruling. A new law enacted in 1941, provided for the repeal of the motor vehicle weight tax, but was declared invalid because of defective title.

Lt. General Ben Lear, second from right, is shown inspecting a White motorized unit for the Army. With him are his aides. President Black, of White, is shown third from the left

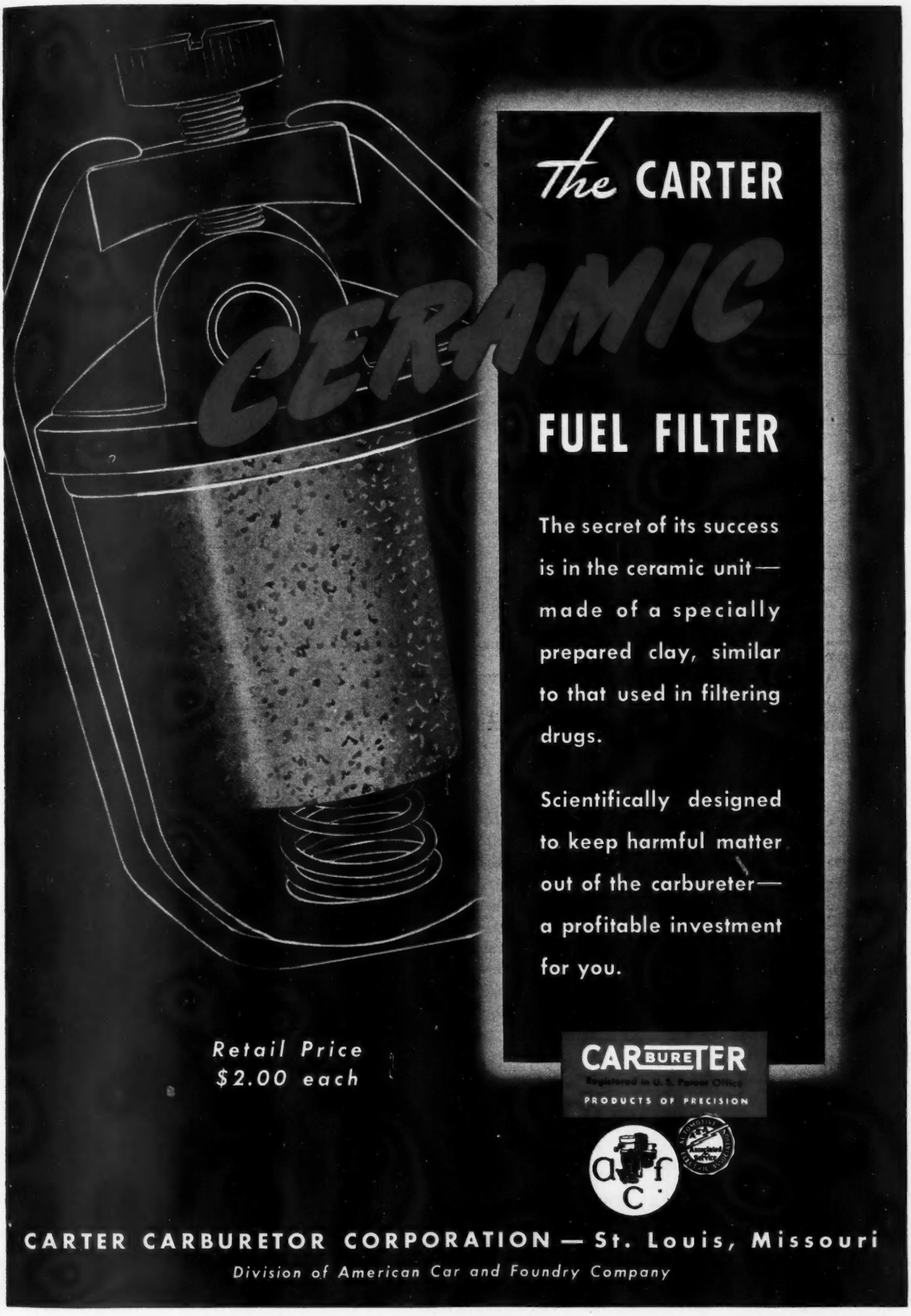
Oregon Ups Weight and Length Limits

The Oregon Highway Commission has recently authorized a length of 60 ft. and a gross weight of 68,000 lb. for civilian cargoes as well as Army and Navy goods.

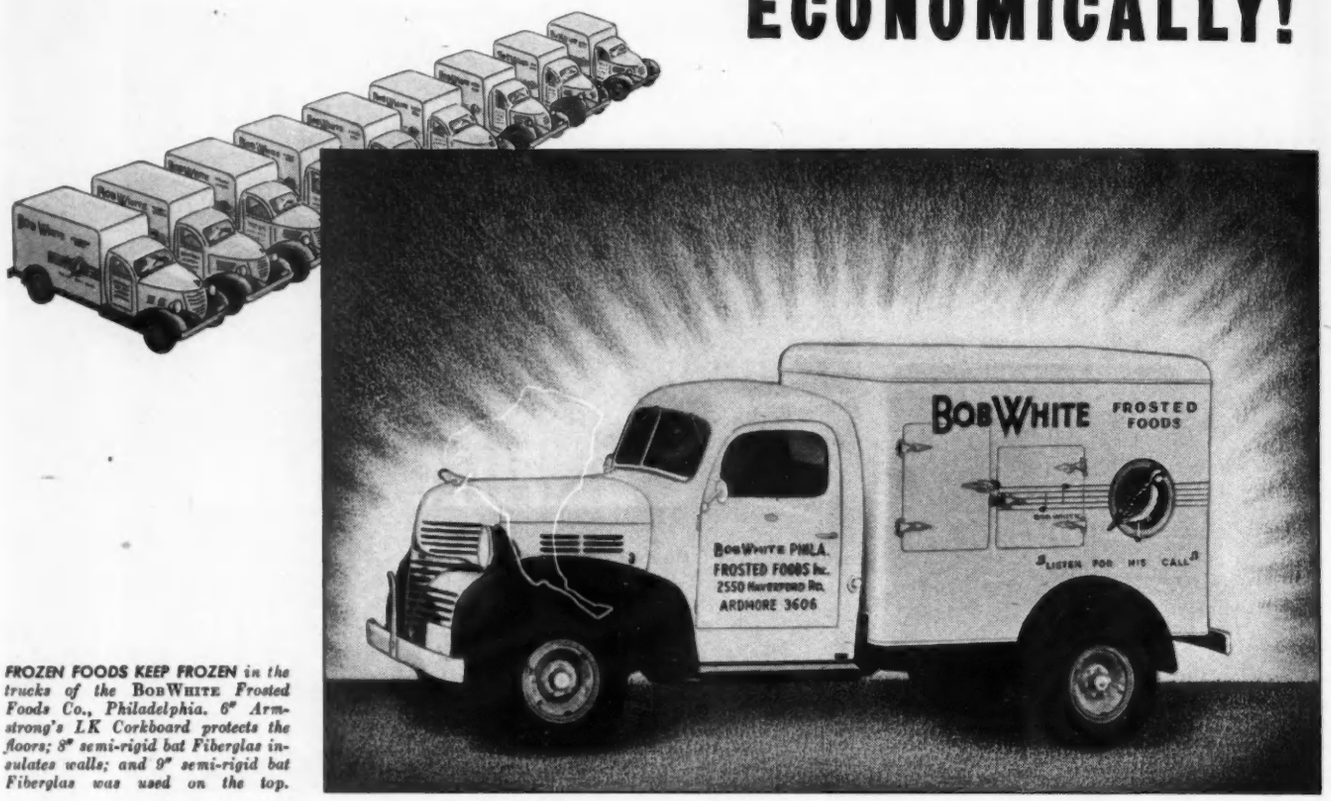
1942 Idaho Plates for 1943

The Law Enforcement Commissioner of Idaho has announced that 1942 license plates may be reassigned for 1943 and used with special windshield stickers signifying license fee has been paid.

(TURN TO PAGE 241, PLEASE)


The CARTER
CERAMIC
FUEL FILTER
The secret of its success is in the ceramic unit—made of a specially prepared clay, similar to that used in filtering drugs.
Scientifically designed to keep harmful matter out of the carbureter—a profitable investment for you.
Retail Price
$2.00 each
CARBURETER
Registered in U. S. Patent Office
PRODUCTS OF PRECISION
CARTER CARBURETOR CORPORATION — St. Louis, Missouri
Division of American Car and Foundry Company

INSULATED TO HOLD ZERO OR LOWER ECONOMICALLY!



***FROZEN FOODS KEEP FROZEN** in the trucks of the* BOBWHITE *Frosted Foods Co., Philadelphia. 6" Armstrong's LK Corkboard protects the floors; 8" semi-rigid bat Fiberglas insulates walls; and 9" semi-rigid bat Fiberglas was used on the top.*

Armstrong's LK CORKBOARD and FIBERGLAS protect this frosted foods fleet*

INSULATION for heavy duty bodies like these must meet many requirements. It must first be *efficient* enough to hold zero or lower safely and economically. *Weight* must be carefully considered, too, because low-cost truck operation requires a maximum pay-load capacity. Finally, you have to consider insulation *life*. Will it *stay* efficient as long as the truck?

The Barry and Baily Company, Philadelphia, met all these insulation requirements when they built this original fleet for BOBWHITE Frosted Foods, Philadelphia. They used a combination of Armstrong's LK Corkboard for the floors and Fiberglas for the walls and tops. Other BOBWHITE fleets have used the same insulation which proved so efficient in these truck bodies.

Armstrong's LK Corkboard is light, yet structurally strong. It is recommended for floors because of its load-bearing strength. Fiberglas, in semi-rigid bat form, is ideal for walls and tops because of its extreme light weight and resilience. Vibration and jolts will not cause it to settle or sag.

Both these materials provide highly efficient barriers to heat's passage . . . both resist moisture. They can be counted on to guard low temperatures safely and economically for years . . . even under severe operating conditions!

COMPLETE INSULATION SERVICE

Truck body makers the country over know Armstrong as "Insulation Headquarters." And they come to "headquarters" to get the *right* insulation for every truck body type—light-duty, heavy-duty, large or small. For months large quantities of Armstrong's Insulations have been used in bodies built for the quartermaster corps, air corps, signal corps, engineers, and other army service branches.

Why not bring us *your* insulation problem. Our many years of insulation experience are at your service. Armstrong Cork Company, Building Materials Division, 913 Concord Street, Lancaster, Pa.

*Reg. U. S. Pat. Off. O.-C. F. Corp.

ARMSTRONG'S EQUIPMENT INSULATION

LK CORKBOARD • FIBERGLAS • TEMLOK

Statement of Policy . . .

Through four major wars — for a period of more than 100 years—Trailmobile and the concern that established the foundation for this famous name, has aided the defense of the nation with necessary transport equipment.

Today we stand united with our nation in defense of our flag against a common enemy of all industry — the enemy of independent minds — the enemy of a happy, freedom loving people.

The victorious conclusion of this conflict will be speeded by the efficient movement of men and munitions to where their vital elements can be most effective.

This movement of mountains of materials throws a vast burden on the transportation facilities of a nation armed with righteous might. Trailmobile will supply the equipment for that need to the full extent of our greatly expanded production capacity. We pledge our utmost of brain and brawn to do our part.

The most particular and insistent customer of Trailmobile, we believe, will agree that the needs of our armed forces come first. But, we will attempt to supply commercial needs, too. Trailmobile sales and service establishments will be maintained to secure the maximum service for your equipment.

In accord with the form and procedure established by the Office of Defense Transportation (ODT) and the War Production Board (WPB), Trailmobile will furnish commercial trailers to maintain public health, safety and welfare—subject to the greater needs of our armed forces for the kind of transportation equipment that is vitally necessary to protect our way of life until victory is ours.

Contact any Trailmobile office for information and forms necessary to secure Trailmobile under the Government Trailer Allocation Plan.

TRAILMOBILE

THE TRAILER COMPANY OF AMERICA, CINCINNATI, OHIO

I.C.C. MOTOR CARRIER SAFETY REGULATIONS

Regulations Affecting All For-Hire and Private Motor Trucks Operating in Interstate or Foreign Commerce

PART 1—Qualifications of Drivers . . . p. 166
PART 3—Parts & Accessories Necessary for Safe Operation . p. 172
PART 5—Hours of Service of Drivers . . . p. 186

INDEX TO PART 1

1.1 Compliance required.
1.2 Minimum requirements.
1.3 Physical examination.
Recommended Standard Physical Examination Form.

1.1. COMPLIANCE REQUIRED.—Every motor carrier shall comply with the following regulations, and shall instruct his or its employees and agents concerned with the transportation of persons or property by motor vehicle with respect thereto.

1.2 MINIMUM REQUIREMENTS.—No motor carrier shall drive, or require or permit any person to drive, any motor vehicle operated in interstate or foreign commerce, unless the person so driving possesses the following minimum qualifications:

1.21 MENTAL AND PHYSICAL CONDITION:
(a) No loss of foot, leg, hand or arm.
(b) No mental, nervous, organic, or functional disease, likely to interfere with safe driving.
(c) No loss of fingers, impairment of use of foot, leg, fingers, hand or arm, or other structural defect or limitation, likely to interfere with safe driving.

1.22 EYESIGHT.—Visual acuity (either without glasses or by correction with glasses of at least 20/40 (Snellen) in one eye, and 20/100 (Snellen) in the other eye; form field of not less than 45 degrees in all meridians from the point of fixation; ability to distinguish red, green, and yellow.

1.23 HEARING.—Adequate hearing.

1.24 LIQUOR, NARCOTICS, AND DRUGS.—Shall not be addicted to the use of narcotics or habit-forming drugs, or the excessive use of alcoholic beverages or liquors.

1.25 DRIVING EXPERIENCE. — Experience in driving some type of motor vehicle (including private automobiles) for not less than one year, including experience throughout the four seasons.

1.26 DRIVING SKILL. — Competency by reason of experience or training to operate safely the type of motor vehicle or motor vehicles which he drives.

1.27 KNOWLEDGE OF REGULATIONS.—Knowledge of rules and regulations issued by the Commission under the Motor Carrier Act, 1935, pertaining to the driving of motor vehicles.

1.28 AGE.—Shall not be less than 21 years of age. Provided, however, that a person between the ages of 18 and 21 may be permitted to drive a motor vehicle controlled and operated by any farmer and used in the transportation of his agricultural commodities and products thereof or in the transportation of supplies to his farm, if such vehicle does not exceed a gross weight, including the load, of 10,000 pounds.

1.29 KNOWLEDGE OF ENGLISH.—Shall be able to read and speak the English language.

1.3 PHYSICAL EXAMINATION.

1.31 DOCTOR'S CERTIFICATE REQUIRED FOR NEW DRIVERS.—On and after January 1, 1940, every motor carrier shall have in

(TURN TO PAGE 168, PLEASE)

WHEN THE I.C.C. SERVICE INSPECTOR Says: STOP!

A recent regulation of the Interstate Commerce Commission requires all motor carriers to be able to stop

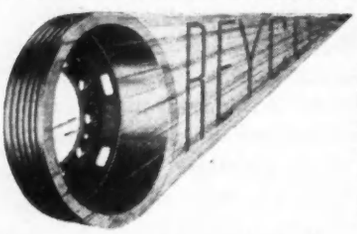
WITHIN 30 FEET FROM 20 MILES PER HOUR

Can your equipment do this?

It has been proven by thousands of experiments that a 12,000 pound force will stop a 20,000 pound truck in a little less than twenty-two-and-a-half feet from twenty miles per hour. Twenty-two-and-a-half feet is three quarters of thirty feet so the I.C.C. is only asking that your brakes be 75 per cent efficient. However, to be safely within the I.C.C. requirements you must try for 100% efficiency.

The answer is balanced brakes. This calls for a regular balancing program, the use of good parts and the insistence on every part doing its job.

The American Trucking Association says "No brake is any better than the brake drum that backs it up."



BRAKE DRUMS are made of a scientifically alloyed iron, tested and proved under conditions far more extreme than those encountered in the service life of automotive brakes. They are resistant to heat, wear, scoring and distortion.

Let us tell you more about them. A REYCO distributor near you can help you. If you are not already acquainted, write to us and we will put you in touch with him.

REYNOLDS MANUFACTURING CO.
Springfield, Missouri

• REYCO •
BRAKE DRUMS

TUNE-UP TIME

FOR LAZY HORSEPOWER

● For a quick spring tune-up, use Casite through the carburetor.

Drivers who use a pint of Casite in the crankcase with each oil change know that it keeps their motors clean and improves lubrication. They also know that a few times a year (every 5000 miles) a tune-up through the carburetor frees sticky valves and immediately improves pick-up and gasoline mileage.

HERE'S HOW YOU DO IT!—With motor at fast idle, slowly pour a pint of Casite through the air intake. Stop the motor, clean and replace the air filter. Watch motor troubles go up in smoke when you start the engine again.

THE CASITE CORPORATION, HASTINGS, MICHIGAN

Watch for the Casite "Horsepower" advertisements in The Saturday Evening Post.

WHAT CASITE DOES

Frees sticky valves and rings . Improves gasoline mileage . Cleans out sludge and gum . . . and keeps them out . Retards formations of engine varnish . Improves lubrication . Makes motors start easier and quicker in winter weather . Breaks in new or reconditioned motors.

CASITE CLEANS OUT MOTORS • KEEPS MOTORS CLEAN

ICC SAFETY REGULATIONS

(CONTINUED FROM PAGE 166)

his files a certificate of physical examination signed by a qualified doctor of medicine for every new driver entering the motor carrier's employment, attesting that the doctor has examined said driver and found him to meet satisfactorily the qualifications set forth in Rules 1.21 to 1.23, inclusive. Said certificate shall be filed with the motor carrier within ten days of the new driver's entering the motor carrier's employment. For the purposes of this rule, a new driver shall be deemed to be any driver applying for employment as a driver who is unable to furnish a certificate of physical examination showing that he has been examined and qualified as required by this rule within one for employment. This requirement shall also apply to owner-drivers, who become such on and after January 1, 1940. Provided, however, that this rule shall not apply to the operation of motor vehicles controlled and operated by any farmer and used in the transportation of his products.

1.32 CARRIER'S RIGHT TO REQUIRE ADDITIONAL EXAMINATIONS. — Nothing contained in Rule 1.31 shall be so construed as to prevent a motor carrier from requiring physical examinations of drivers in addition to those prescribed.

(TURN TO PAGE 170, PLEASE)

Keep 'em Rolling with HYGRADE CONTAIN-ALL Carburetor REBUILDING KIT For CARBURETORS

CONTAIN-ALL KITS

HYGRADE CONTAIN-ALL REBUILDING KIT SUPER MILEAGE For FUEL PUMPS

The RESPONSIBILITY RESTS ON YOU!

AMERICA'S vast fleet of commercial cars plays a conspicuous part in the preservation of our national prosperity. It, too, must be "kept rolling."

Upon you, Mr. Serviceman, devolves the responsibility for prolonging the life of these millions of heavy duty trucks, vans and delivery wagons.

You can do it—if you will. By a vigilant system of inspection. By checking the fast-wearing units. By keeping a watchful eye on *every auxiliary part*, so that early repairs will forestall breakdown—and assure continued performance.

Not the least important of your responsibilities is to maintain carburetors and fuel pumps at highest operating efficiency. In that way you not only help to lengthen car life but save gas for the Government and money for the truck owner.

Don't forget that Hygrade's Contain-All Kits make it easy for you to do a quick reconditioning job on these vital units — *with satisfactory results* assured—and all at a tidy profit.

Leading jobbers everywhere

HYGRADE PRODUCTS COMPANY, INC.
33-35 Thirty-Fifth Street
Long Island City, N. Y.

Hygrade Line AUTOMOTIVE PRODUCTS
Service Parts for
CARBURETORS
FUEL PUMPS
SPEEDOMETERS
SHOCK ABSORBERS
TEMPERATURE GAUGES
FUEL LINES AND FITTINGS

HYGRADE

Don't BUY Labor—SELL it!

RECOMMENDED PRACTICES

(Not compulsory requirements)

The following form is recommended as a Standard Physical Examination form in connection with physical examination of drivers required under Rule 1.3:

RECOMMENDED STANDARD PHYSICAL EXAMINATION FORM

For Drivers of Interstate Busses and Trucks

(Note to Examining Physician): Read instructions before starting examination.

Be sure to record an answer to each question When negative or positive so state

PERSONAL AND MEDICAL HISTORY

Name in full.....
Age last birthday..... Color.....
Marital Status..... S M W D
Address: Street..... City..... State.....
Usual occupation.....
Years experience as operator of commercial motor vehicles.....

History of past illnesses
(When positive *insert date*)

Tuberculosis	Hemorrhoids	Diabetes
Pleurisy	Syncope	Syphilis
Hemoptysis	High Blood	Gonorrhea
Peptic Ulcer	Pressure	Hematuria
Pneumonia	Epilepsy or Fits	
Dysentery	Paralysis	

History of hospitalization.....
Have you other illnesses, injuries, or operations.....

RECORD OF PHYSICAL FINDINGS

General Appearance and Development: Good..... Fair..... Poor.....
Height..... Weight.....
Head:
Eyes: For distance {without glasses / with glasses if worn} Right 20/ Left 20/
Evidence of disease or injury: Right..... Left.....
Color Vision (Lantern).....
Ears: Hearing, 20 ft.: Right ear /20 Left ear /20
Disease or injury.....
Mouth..... Throat.....
Thorax:
Heart.....
If organic disease is present, is it fully compensated?.....
Blood pressure (sitting): Systolic..... Diastolic.....
Pulse: Before exercise..... After 2 min. rest.....
Lungs.....
Abdomen:
Scars..... Abnormal masses..... Tenderness.....
Hernia: Yes..... No..... If so, where?.....
Is truss worn?.....
Genito-Urinary:
Scars..... Urethral Discharge.....
Reflexes:
Rhomberg.....
Pupillary..... Light R..... L.....
Accommodation: R..... L.....
Knee Jerks:
Right: Normal..... Increased..... Absent.....
Left: Normal..... Increased..... Absent.....
Extremities:
Upper.....
Lower.....
Spine.....
Laboratory findings if tests are indicated:
Urine: Sp. Gr. ..... Alb. ..... Sug. .....
Other.....

(Date) (Examining Physician)

PHYSICIAN'S CERTIFICATE

This is to certify that I have this day examined ..... and find him

(physically fit)
(physically fit only when wearing glasses)
(physically unfit and disqualifying condition has been discussed with applicant)

to perform the usual duties incident to employment as a driver of commercial motor vehicles. This certificate is based upon information obtained in the making of a physical examination in accordance with the regulations of the Interstate Commerce Commission for the qualification of drivers and the standard form recommended for such examination. I have kept on file in my office this record of his examination.

Date..... Place..... Signed.....
(Examining physician)
Address.....
Driver's Signature.....

NOTE.—Motor carriers desiring to use the Recommended Standard Physical Examination Form and Physician's Certificate must obtain their own supplies of such forms. The forms should be reproduced in size considerably larger than here shown.

KEEP 'EM WORKING!

YOUR LIFTING EQUIPMENT IS VITAL—GIVE IT THE CARE IT DESERVES

★ ***Rugged dependability*** is so much a part of Walker Lifting equipment that you are apt to just take it for granted. It is easy to forget that service equipment needs service, too.

Dirt and neglect are the greatest causes of jack breakdowns. You can add years of life to this important equipment just with proper lubrication and thorough cleaning at regular intervals.

You don't have to baby Walker Jacks... they are built to take it. But in times like these when new lifting equipment is scarce and when long trouble-free service life is so important, a little extra care pays big dividends.

* * *

For up-to-the-minute information on the care and conservation of your lifting equipment, get in touch with the nearest official Walker Service Station—your Walker jobber can give you the address . . . or write us here at the factory. Walker Manufacturing Company of Wisconsin, Racine, Wis. Makers of Walker Jacks, Lifts, and Silencers.

WALKER JACKS

WALKER MANUFACTURING COMPANY OF WISCONSIN • RACINE, WISCONSIN

ICC SAFETY REGULATIONS

(CONTINUED FROM PAGE 168)

GENERAL INSTRUCTIONS FOR MAKING PHYSICAL EXAMINATION AND RECORDING FINDINGS

Be sure to record an answer to each question. When negative or positive so state

MEDICAL HISTORY

The purpose of this physical examination is to detect the presence of physical defects of such a character and extent as to affect the applicant's ability to safely operate a motor vehicle. The examination should be made carefully and at least as complete as is indicated by the attached form. Defects may be recorded which do not, because of their character or degree, indicate that a certificate of physical fitness should be denied. The presence, however, of these defects should be discussed with the applicant and he should be encouraged to take the necessary steps to insure correction particularly of those which if neglected might lead to a condition likely to affect his ability to drive safely. Careful inquiry regarding past illness, the character and date of such illness, may reveal cause for defects found upon physical examination. Lack of knowledge concerning the etiology of certain defects may result in the rejection for employment. Such data also may indicate the need for making certain laboratory tests. Certain serological and laboratory tests will frequently be made by State Department of Health laboratories without charge.

General Appearance and Development.—Notice *serious* under or over weight; any posture defects; perceptible limp, anemia, tremor or other form of nervousness such as might be caused by chronic alcoholism, thyroid intoxication, or other illnesses. The rules of the Interstate Commerce Commission provide that no driver shall be addicted to the use of narcotics, or habit-forming drugs, or the excessive use of alcoholic beverages or liquors.

Height and weight.—Stripped to the waist with shoes and socks removed.

Head—Eyes.—The telebinocular, Snellen chart, and other approved tests may be used to measure visual acuity. It is desired, however, when other than the Snellen chart is used, that the results of such test be expressed in values comparable to the standard Snellen chart. If applicant wears glasses, these should be worn while applicant's visual acuity is being tested. Indicate on record by encircling appropriate phrase on form "without glasses" or "with glasses if worn." In recording distant vision use 20 feet as normal. Report all vision as a fraction with 20 as numerator and the smallest type read at 20 feet as denominator. Note ptosis, discharge, corneal scar, exophthalmos or strabismus uncorrected by glasses as determined by the simple cover test.

Ears.—Note evidence of mastoid or middle ear disease; discharge. In recording hearing record 20 feet as normal distance for conversational voice and record deviation from normal as fraction with 20 feet as denominator and actual distance as numerator.

Mouth.—Note evidence of infection, pyorrhea.

Throat.—Note evidence of disease, enlarged or infected tonsils.

Thorax—Heart.—Stethoscopic examination is required. Note murmurs and arhythmia.

Blood pressure.—May be recorded with either spring or mercury column type of sphygmanometer.

Pulse.—Normal pulse taken after being seated at least 2 minutes then have applicant stand and placing one foot on the seat of an ordinary chair raise his body to an erect position 20 times in 30 seconds. Pulse rate should return to his normal after 2 minutes rest. Because of abnormal conditions, some applicants will be unable to do this. This test has been found helpful in ascertaining physical ability for work.

Lungs.—It is necessary that the auscultatory cough be used. Tuberculosis, if suspected state whether active or arrested, and if arrested, your opinion as to how long it has been quiescent. Sputum to be examined for tubercle bacilli in all sus-

(TURN TO PAGE 172, PLEASE)

For today's service you need GATKE Brake Blocks, *Custom-Bilt* for your job. They give *smooth, positive, non-grabbing* action that *saves* tires; *dependable* stopping under *all* conditions; and *long* service life with *fewer* adjustments at *the lowest maintenance expense.*

All over the country, on all kinds of fleets, doing all types of hauling, GATKE Genuine *Custom-Bilt* Brake Blocks are saving time and money for Fleet Operators.

The GATKE *Simplified* Fleet Survey System helps you get *all the advantages and saves time for you too.* Just *ask your GATKE Jobber* or write for particulars.

GATKE *CUSTOM-BILT* BRAKE BLOCKS

GATKE CORPORATION
228 N. LaSalle St., CHICAGO

Longer OIL CONTROL *because*

RAMCO PRODUCTS ARE BEING WIDELY USED TO PROMOTE VICTORY

GREATER BLOW-BY CONTROL

Blow-by is the enemy of long piston ring life. It either burns or blows the oil film from the cylinder wall. The result is metal to metal contact of rings and cylinder wall that sets up excessive friction! And friction means wear!

Illustrated here are some of the blow-by control features which Ramco has developed through 21 years of engineering the spring ring principle. Special features like these, plus the extra durability built into Ramco 10-Up special Heavy Duty Truck and Tractor Rings, are responsible for their adoption by more and more of the nation's fleets.

Test them in your fleet and you'll see why! We will be glad to cooperate in every possible way with fleet operators desiring to make such tests.

See your Ramco Jobber or write Ramsey Accessories Mfg. Corp., 3693 Forest Park Blvd., St. Louis, Mo. In Canada, 364 Richmond St., W., Toronto, Ontario.

2 MORE BEARING SURFACES
provide greater defense against blow-by.
3 DOUBLE DEFENSE
against blow-by provided by the steel segment of the Ramco Spring Type 10-Up Compression Ring.
Copyright, 1942, Ramco
NO GAP FLUTTER
It Bridges the Gap!
5

RE-POWER *with* RAMCO 10 *up*

IT BRIDGES THE GAP!

PISTON RINGS AND PISTONS EXPANDED

ICC SAFETY REGULATIONS

(CONTINUED FROM PAGE 170)

pected cases. Sample may be sent to the State Health Department.

Abdomen — Scars. — If present state whether recent and if abnormally tender or if there is any evidence of hernia at the site of scar.

Abnormal masses. — If present note tenderness and whether or not individual knows how long they have been present.

Tenderness. — When noted state where most pronounced and cause suspected.

Hernia.—Note whether no hernia, but impulse on coughing; no hernia or impulse, but abnormally large rings. Any hernia should be noted, and if present state whether it is retained by well-fitted truss.

Genito—Urinary. — When scars or urethral discharge are present indicate patient's reason for same and when indicated submit smear of discharge to laboratory for examination.

Reflexes.—If positive Rhomberg is reported, indicate degree. Pupillary reflexes should be reported for both light and accommodation. Knee jerks are to be reported absent only when not obtainable upon reinforcement and increased when foot is actually lifted from the floor following light blown upon the patella; otherwise as normal.

Extremities—Upper.—Note deformities and limitation of motion.

Lower. — Note deformities, limitation of motion; varicose veins. In case of hand deformities not particularly whether or not sufficient grip is present to enable driver to secure a grip on the wheel. Show chronic ulcers. Note any atrophy or paralysis.

Spine.—Note deformities and limitation of motion. Be sure to record loss of foot, leg, fingers, hand or arm, or impairment of use thereof, or other structural defect or limitation, likely to interfere with safe driving.

Laboratory findings.—Urine analysis is indicated whenever systolic blood pressure is over 150 and diastolic over 100 and such other times as medical history or findings upon physical examination may indicate that they are necessary. A serological test should always be taken in case of those giving positive history of leutic infection or present physical findings presenting possibility of latent syphilis.

Upon completion of the examination, physician should always date and sign his record of the same.

PART 3
PARTS AND ACCESSORIES NECESSARY FOR SAFE OPERATION

INDEX TO PART 3

3.1 Compliance required.
3.2 Additional parts and accessories allowable.
3.3 Equipment required on all motor vehicles (except in drive-away operations).
3.31 Lighting devices and reflectors on all vehicles.
3.32 Brakes on all vehicles.
3.33 Safety glass on all vehicles.
3.34 Miscellaneous parts and accessories on all vehicles.
3.4 Additional equipment required on new vehicles.
3.41 Lighting devices on new vehicles.
3.42 Brakes on new vehicles.
3.43 Safety glass on new vehicles.
3.44 Miscellaneous parts and accessories on new vehicles.

3.1 COMPLIANCE REQUIRED.—Every motor carrier shall comply with the following regulations.

3.2 ADDITIONAL PARTS AND ACCESSORIES ALLOWABLE. — Nothing contained in these regulations shall be construed to prohibit the use of additional parts and accessories, not inconsistent with these regulations, tending to increase the safety of operation of motor vehicles, and to prevent accidents.

PARTS AND ACCESSORIES REQUIRED ON ALL MOTOR VEHICLES[4]

[Except in drive-away operations]

3.3 EQUIPMENT REQUIRED ON ALL MOTOR VEHICLES (Except in Drive-

(TURN TO PAGE 175, PLEASE)

RESEARCH

IS THE KEY TO FEL-PRO SUCCESS IN SERVING INDUSTRY, CAR MAKERS AND AUTOMOTIVE REPLACEMENT FIELD

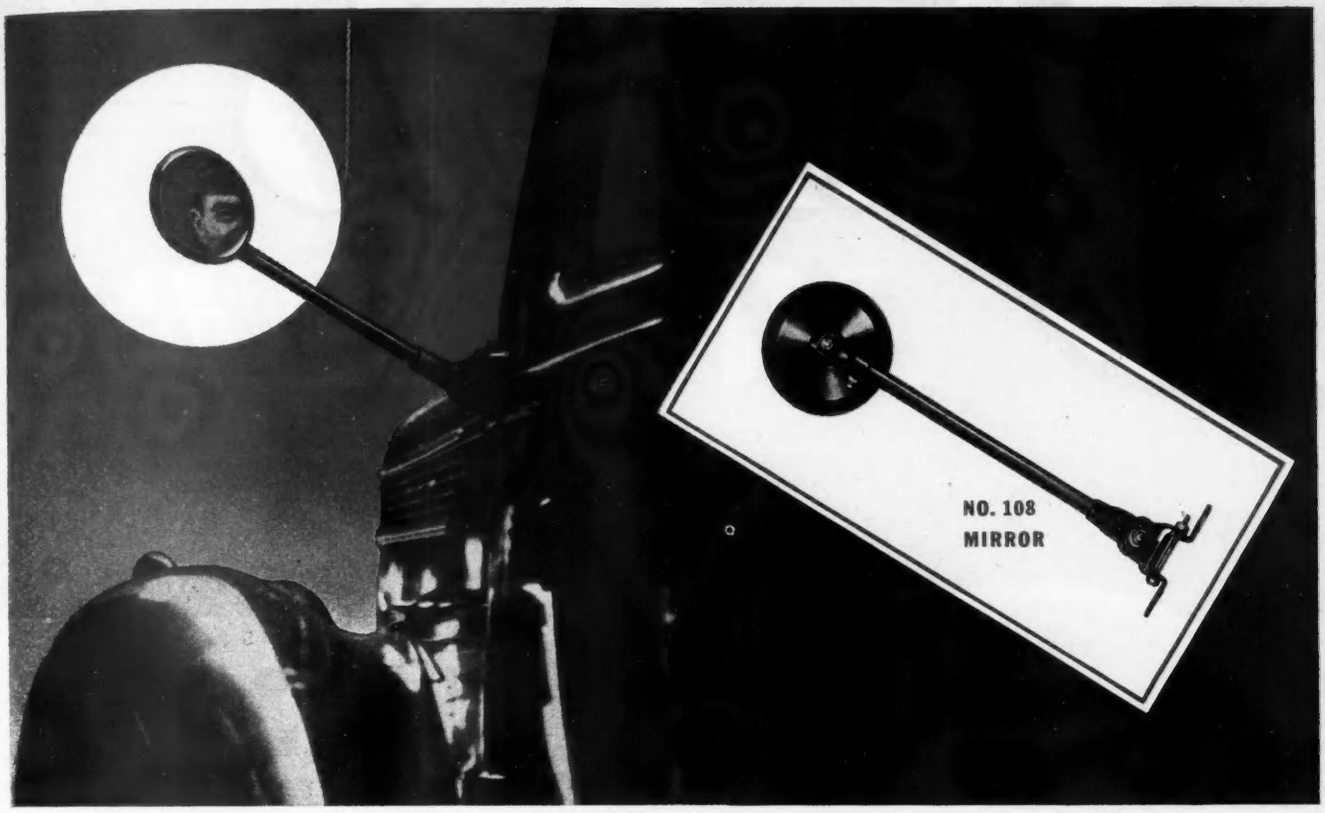
WHEN you use Fel-Pro Gaskets you are using gaskets made by a manufacturer with many years' experience in designing gaskets to meet every possible need in both the industrial and automotive fields. You can rely on Fel-Pro Gaskets to stand up under the toughest service—to resist the highest temperatures and compressions of modern motors.

With Fel-Pro you can secure an especially engineered gasket for your specific requirements as the Fel-Pro line is complete.

Write for details and for your copy of the Fel-Pro Catalog.

FEL-PRO Gaskets
PUMP PACKING
GREASE RETAINERS

FELT PRODUCTS MFG. CO., 1520 CARROLL AVE., CHICAGO, ILL.



Engineering Foresight...for Better Hindsight!

K-D REAR-VIEW MIRRORS

● Like everything else in its line, K-D rear-view mirrors for trucks are *designed by engineers*. They're made to do a job—provide clear, safe, long-range vision down the road *behind*. And there are no high replacement costs *ahead*.

For these K-D mirrors are built as airplanes are built—light on weight—heavy on durability of metal—with minimum wind resistance. K-D mirrors are shock and vibration proof. Once they're set they stay put. They're engineered to "take it"—and they do!

In these mirrors look for long, efficient service. That's exactly what you'll get, *if* you see your K-D Jobber. He's headquarters for mirrors, as well as safety lighting equipment.

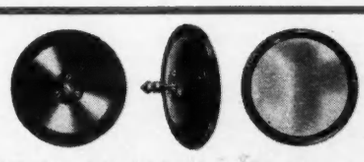
THE K-D LAMP COMPANY, CINCINNATI, OHIO • Export Address: 280 Broadway, New York, N.Y.

K-D No. 108 EXTENSION MIRROR

1. "Evalast" Mirror specially plated before silvering, guaranteed against clouding, streaking or moisture.
2. Tough steel ball swivel, rigidly held between 2 sockets, by clamping washers and 3 clamping screws. Tension provided keeps mirror "put" regardless of shock or vibration.
3. Extension arm 15" to 27" heavy telescoping steel tubing. Larger arm has heavy permanent collar with large set screw and lock nut.
4. "Split-yoke" adjustable hinge bracket mounting of very heavy metal. This is most unique as it is one of the few mirrors adaptable for hinge or panel mounting. The entire bracket is adjustable down to any door hinge width and requires no bushings or spacer washers.
5. Choice of 5½" or 6" mirrors. "Evalast" type or Neutralite (glare reducing) glass.

K-D LIGHTING *The Right Light for the Right job*

K-D No. 109 MIRROR—A really fine, even though modestly priced mirror. While it is similar in construction to No. 108 it is made lighter—for lighter duty. With ball socket mirror but without "split-yoke" mounting. Extension 15" to 24".



K-D No. 106 MIRROR HEAD—Five and one-half or six-inch ball-socket heads with "Evalast" mirrors specially plated before silvering and hermetically sealed—guaranteed against clouding, streaking or moisture. Also available, Neutralite (glare reducing).

K-D No. 110 MIRROR—Designed primarily for military use, but available for commercial purposes. Probably heaviest extension arm mirror made—a real brute for punishment. Details are same as No. 108 except furnished for panel mounting only.

Buffalo MUFFLERS

BUILT TO STAY ON THE JOB!

● Mufflers—like trucks themselves—have to take a terrific beating, inside and out.

Buffalo Mufflers are the product of long experience in the engineering and manufacture of mufflers for original equipment on medium and heavy trucks. They are designed so skilfully and put together so solidly that they'll take an incredible amount of physical punishment.

Buffalo staying power—accuracy of fit—and freedom from back-pressure are what you'd expect from a company that's been building mufflers since 1913—and today holds more design and construction patents than any other automobile and truck muffler manufacturer.

Distribution through NAPA Warehouses and associated jobbers insures prompt service on all numbers.

BUFFALO PRESSED STEEL COMPANY, INC.
YOUNGSTOWN, OHIO

Manufacturers also of Kralinator Oil Filters and Replacement Elements for All Popular Filters

Stop that Noise!

ICC SAFETY REGULATIONS

(CONTINUED FROM PAGE 172)

away Operations).—Every motor vehicle except motor vehicles engaged in driveaway operation shall be equipped as follows:

3.31 LIGHTING DEVICES AND REFLECTORS ON ALL VEHICLES.

3.3101 *Every bus or truck.*—On every bus or truck, whatever its size, there shall be at least the following lighting devices and reflectors:

(a) On the front, two head lamps, one at each side.

(b) On the rear, one red tail lamp; one red or amber stop light; two red reflectors, one at each side.

3.3102 *Every bus or truck 80 inches or more in width.*—On every bus or truck 80 inches or more in over-all width there shall be at least the following lighting devices and reflectors:

(a) On the front, two head lamps, one at each side; two amber clearance lamps, one at each side.

(b) On the rear, one red tail lamp; one red or amber stop light; two red clearance lamps, one at each side; two red reflectors, one at each side.

(c) On each side, one amber side-marker lamp, located at or near the front; one red side-marker lamp, located at or near the rear; one amber reflector, located at or near the front; one red reflector, located at or near the rear.

3.3103 *Every tractor.*—On every tractor there shall be at least the following lighting devices:

(a) On the front, two head lamps, one at each side; two amber clearance lamps, one at each side.

(b) On the rear, one red tail lamp; one red or amber stop light.

3.3104 *Every semitrailer or full trailer in excess of 3,000 pounds gross weight.*—On every semitrailer or full trailer having a gross weight in excess of 3,000 pounds there shall be at least the following lighting devices and reflectors:

(a) On the front, two amber clearance lamps, one at each side.

(b) On the rear, one red tail lamp; one red or amber stop light; two red clearance lamps, one at each side; two red reflectors, one at each side.

(c) On each side, one amber side-marker lamp, located at or near the front; one red side-marker lamp, located at or near the rear; one amber reflector, located at or near the front; one red reflector, located at or near the rear.

3.3105 *Every semitrailer or full trailer weighing 3,000 pounds gross or less.*—On every semitrailer or full trailer having a gross weight of 3,000 pounds or less, there shall be at least the following lighting devices and reflectors:

(a) On the front, no requirement.

(b) On the rear, one red tail lamp; two red reflectors, one at each side; one red or amber stop light if the semitrailer or full trailer obscures the stop light on the towing vehicle.

3.3106 *Every pole trailer.*—On every pole trailer there shall be at least the following lighting devices and reflectors:

(a) On the front, no requirement.

(b) On the rear, one red tail lamp; two red reflectors, one at each side, placed to indicate extreme width of the pole trailer or its load, whichever is wider.

(See Rule 2.34 requiring red lantern or flag on end of projecting load.)

(c) On each side, on the rearmost support for the load, one combination marker lamp showing amber to the front and red to the side and rear, mounted to indicate maximum width of the pole trailer or load; one red reflector, located at or near the rear.

3.3107 *Electric lamps to be mounted permanently.*—Where electric lamps are used to meet the requirements of Rule 3.31, they shall be securely and permanently affixed to the permanent structure of the motor vehicle, except for the combination marker lamps on pole trailers prescribed in Rule 3.3106 (c).

3.3108 *Clearance lamps to indicate extreme width.*—Required clearance lamps shall be mounted in such a manner as to indicate the extreme width of the motor vehicle and as near the top thereof as practicable.

3.3109 *Side-marker lamps may be combined with clearance lamps.*—Side-marker

(TURN TO PAGE 176, PLEASE)

[4] See under Rule 3.4 for additional requirements for new vehicles.

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(CONTINUED FROM PAGE 175)

lamps may be in combination with clearance lamps and may use the same light source.

3.3110 *Color of lighting devices.*—The color of lighting devices shall be as follows:

(a) All front clearance lamps, and all side-marker lamps except the one on each side at or near the rear, on any bus, truck, tractor, semitrailer, full trailer, or pole trailer, shall when lighted display an amber color.

(b) No red lighting device of any character shall be mounted at any place other than on or near the rear on any bus, truck, tractor, semitrailer, full trailer, or pole trailer.

(c) All rear clearance lamps, the side-marker lamp on each side at or near the rear, and any other lamps mounted on the rear, on any bus, truck, tractor, semitrailer, full trailer, or pole trailer, shall when lighted display a red color except as permitted by paragraphs (d), (e), (f), and (g) of this rule.

(d) The stop light or other warning device on the rear of any motor vehicle may be red or amber.

(e) The color blue or purple may be used on the front and rear of any motor vehicle in a device to indicate the speed at which the motor vehicle is moving.

(f) Backing lights of any color may be mounted on the rear of any motor vehicle if the switch controlling such lights be so arranged that they may be turned on only when the motor vehicle is in reverse gear. Such backing lights when unlighted shall be so covered or otherwise arranged as not to reflect objectionable glare in the eyes of drivers of vehicles approaching from the rear.

(g) No provision of this rule shall be so construed as to prohibit the use of any white light or lights for the purpose of illuminating license plates.

3.3111 *Visibility of clearance, side-marker, and tail lamps.*—Clearance, side-marker, and tail lamps shall when lighted be capable of being seen at a distance of 500 feet under normal atmospheric conditions during the time when lights are required. The light from front clearance lamps shall be visible to the front, from side-marker lamps to the side, and from rear clearance and tail lamps to the rear, of the motor vehicle.

3.3112 *Operation and visibility of stop light.*—Stop lights shall be actuated by application of the service (foot) brakes and shall be capable of being seen and distinguished from a distance of 100 feet to the rear of the motor vehicle in normal daylight; but shall not project a glaring or dazzling light. The stop light may be incorporated with the tail lamp.

3.3113 *Mounting of reflectors.*—No reflector required by these regulations shall be mounted upon the motor vehicle at a height to exceed 60 inches, nor less than 24 inches, above the ground on which the motor vehicle stands.

3.3114 *Visibility of reflectors.*—Every reflector shall be of such size and characteristics as to be readily visible at night from all distances within 500 feet to 50 feet from the motor vehicle when directly in front of a normal headlight beam.

NOTE.—*Any reflex reflector approved by any of the States listed below, or by any other State having equivalent or superior requirements, or any reflex reflector meeting the requirements as set forth in "S. A. E. Recommended Practice" for reflex reflectors, as promulgated by the Society of Automotive Engineers, 29 West 39th St., New York, N. Y., shall be deemed to meet the requirements of Rule 3.3114 with respect to performance characteristics. The listed States are New Hampshire, Massachusetts, Rhode Island, New York, and California.*

3.3115 *Reflectors incorporated with tail lamps.*—One or both of the required rear red reflectors may be incorporated within the tail lamp or tail lamps, provided that any such tail lamps be located within the height limits specified for reflectors. Whether or not the rear reflectors are incorporated in tail lamps, they shall be located on the rear of the motor vehicle at opposite sides and shall also meet the requirements as to visibility set forth in Rule 3.3114.

3.3116 *Color of reflectors.*—All reflectors mounted on any bus, truck, tractor, semi-

(TURN TO PAGE 178, PLEASE)

ONLY SURE WAY..

to seal a tire valve is with an air-tight cap

After pressure testing, always "recap" the tire valve

GUARANTEED AIR-TIGHT UP TO 250 LBS. PRESSURE.

INSTALL FRAMS NOW *(while you can)*

WE wish you could read our mail—and see the reports we get from motor fleet operators about their experience with Fram. These letters, based on maintenance shop records, show that you can count on Fram Oil Filters to keep your equipment on the road longer—to increase the life of motor parts—to cut overhaul time and costs—to save oil and motors.

"Cuts engine wear in half," says a bus operator. "200,000 miles and more before reboring," reports a transportation company. "Increased mileage between oil changes on trucks from 1,000 to 5,500 miles," says a distributing company. And these are just a few of many.

Join the fleet owners who are saving motors and money with Fram. You don't risk a penny. Here's Fram's Guarantee: Put Frams on your fleet. Operate for 90 days. Then, if you're not convinced that Frams save their cost many times over, we'll gladly refund your money. Get the complete Fram story. Drop a line today to: Fram Corporation, Providence, R. I.

"How's Your Oil Filter?"
THE DIP-STICK
TELLS THE STORY

IF YOUR FLEET IS ALREADY EQUIPPED WITH FILTERS—

Remember that you now can get genuine, chemically-treated Fram Replacement Cartridges for most makes and types of filters. A Fram Cartridge does what no non-chemical cartridge can do. In addition to filtering out dust, grit, carbon and sludge, a Fram Cartridge also impedes the formation of acids and corrosives—and that means extra savings on motors and parts.

ICC SAFETY REGULATIONS

(CONTINUED FROM PAGE 176)

trailer, full trailer, or pole trailer, shall reflect an amber color, except those placed on the rear and on the sides nearest to the rear thereof, which shall reflect a red color.

3.3117 *Detachable electrical connections.*—Means for establishing electric connection between towing and towed vehicles, and other detachable electric connections, shall be mechanically and electrically adequate, free of short or open circuits. Suitable provision shall be made in every detachable connection to afford reasonable assurance against accidental disconnection. Precaution shall be taken to provide sufficient slack in the connecting wire or cable without twisting or kinking thereof.

3.32 BRAKES ON ALL VEHICLES.

3.321 ADEQUACY OF BRAKES.—Every bus, truck, and tractor shall be equipped with brakes adequate to control the movement of, and to stop and to hold, such vehicle, including two separate means of applying the brakes. At least one such braking means shall be a mechanical hand (parking) brake which shall employ a ratchet and pawl or other suitable locking and releasing mechanism to insure the setting and holding of at least one set of brakes. If these two separate means of applying the brakes are connected in any way, they shall be so constructed that failure of any one part of the operating mechanism shall not leave the vehicle without brakes adequate to stop and to hold such vehicle.

3.322 BRAKES ON COMBINATIONS OF MOTOR VEHICLES.—Every combination of motor vehicles shall be equipped with brakes upon one or more of such motor vehicles, adequate to stop and to hold such combination of motor vehicles.

3.323 BRAKE PERFORMANCE.—Every motor vehicle or combination of motor vehicles, according to its type, shall be capable at all times and under all conditions of loading, of stopping on a dry, smooth, level road free from loose material, upon application of the service (foot) brake, within the distances specified below, or shall be capable of decelerating at a sustained rate corresponding to these distances:

	Feet to stop from 20 miles per hour	Deceleration in feet per second per second (nearest ½ foot)
Vehicles or combinations of vehicles having brakes on all wheels	30	14
Vehicles or combinations of vehicles not having brakes on all wheels	45	9.5

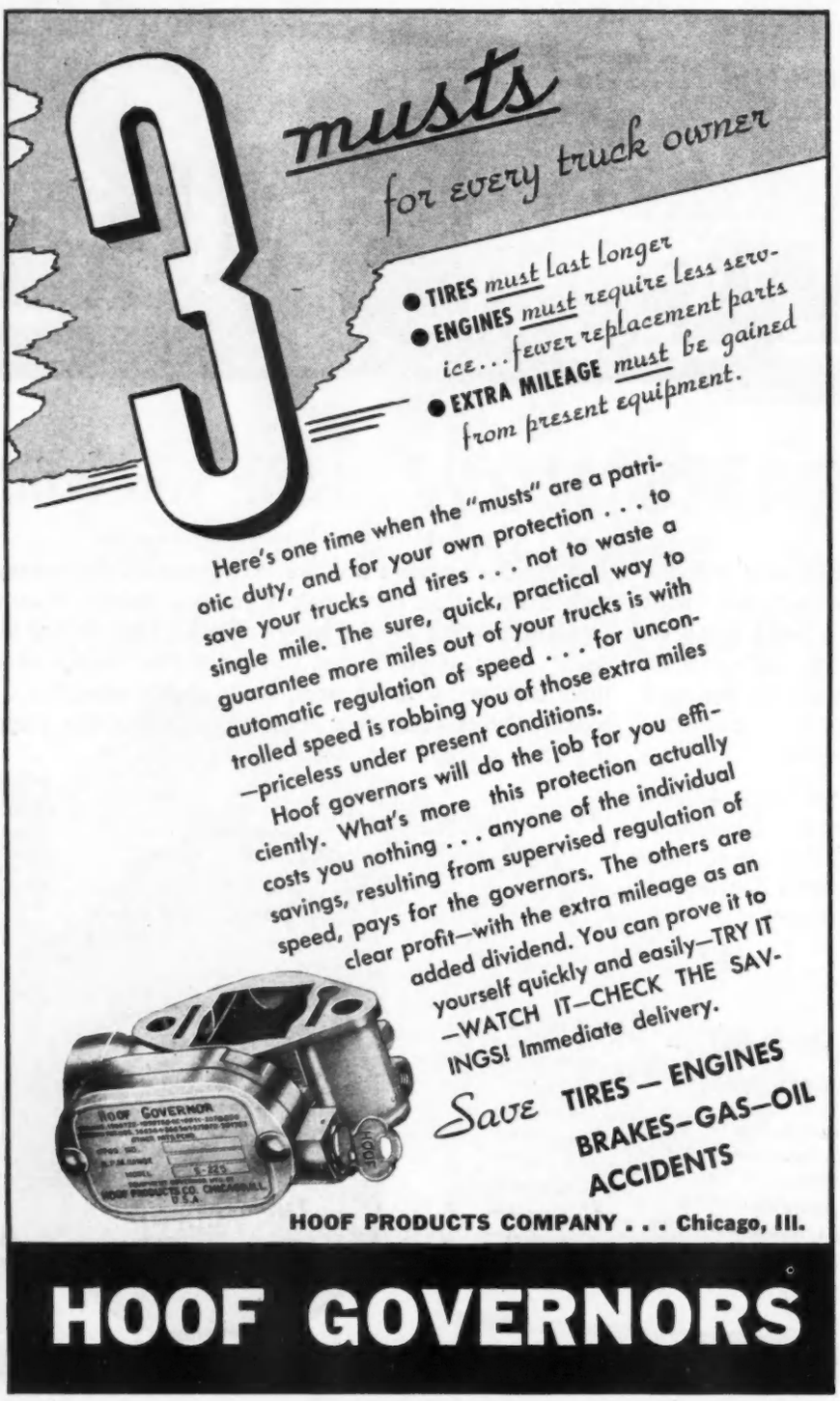
NOTE.—*The means used for enforcement purposes to determine if a motor vehicle or combination of motor vehicles is in compliance with the provisions of the above paragraph, will be by an instrument or a machine capable of being read in feet to stop from 20 miles per hour, deceleration in feet per second per second, or other equivalent units; the manner of use of these instruments or machines to be prescribed for each type of instrument or machine so used.*

3.324 APPLICATION OF BRAKES ON COMBINATIONS OF MOTOR VEHICLES.—In any combination of motor vehicles, means shall be provided for applying the rearmost trailer brakes, of any trailer equipped with brakes, in approximate synchronism with the brakes on the towing vehicle and developing the required braking effort on the rearmost wheels at the fastest rate; or means shall be provided for applying braking effort first on the rearmost trailer equipped with brakes; or both of the above means capable of being used alternatively or conjunctively may be employed.

3.325 INDEPENDENCE OF BRAKING CONTROLS.—Means of braking, the operating controls of which shall be independent of the operating controls of the service (foot) brake, shall be provided to hold any motor vehicle or combination of motor vehicles stationary on any up or down grade upon which it is to be operated.

3.326 ADEQUACY OF BRAKE TUBING AND HOSE.—All brake tubing and brake hose shall be adequate in material and construction to insure proper continued functioning; sufficiently long and flexible to accommodate without damage all normal motions of the parts to which they are attached; and suitably secured and protected against chafing or other mechanical injury.

(TURN TO PAGE 180, PLEASE)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● TIRES must last longer
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KERKLING & COMPANY, INC.

BLOOMINGTON, INDIANA, U.S.A.

ICC SAFETY REGULATIONS

(CONTINUED FROM PAGE 178)

3.327 BRAKE TUBING AND HOSE CONNECTIONS.—All connections for compressed air, vacuum or hydraulic braking systems shall be adequate in material and construction to insure proper continued functioning; and shall be so designed, constructed, and installed as to insure, when properly connected, an attachment free of leaks, constrictions, or other defects. Suitable provision shall be made in every detachable connection to afford reasonable assurance against accidental disconnection.

3.328 BRAKES TO BE OPERATIVE AT ALL TIMES.—All brakes with which motor vehicles are equipped shall be operative at all times. Means may be used for reducing the braking effort on the front wheels of any bus, truck, or tractor, provided that no such means shall be capable of making the front wheel brakes entirely inoperative.

3.33 SAFETY GLASS ON ALL VEHICLES.

3.331 REPLACEMENTS OF GLASS. — Whenever glass is replaced in the windshield and in the window next to the driver, in a bus, truck, or tractor; or in the doors and rear windows of a bus; or in the rear window of the driving compartment of a truck or tractor, the replacement shall be made with safety glass, which shall conform to the requirements contained in the "American Standard, Safety Code for Safety Glass for Glazing Motor Vehicles Operating on Land Highways, Z 26.1—1938," approved March 7, 1938, by the American Standards Association, 29 West 39th Street, New York, N. Y.

3.332 CASE-HARDENED GLASS PROHIBITED. —Case-hardened glass shall not be used for replacement purposes in any windshield, door, or window opening of any motor vehicle.

3.34 MISCELLANEOUS PARTS AND ACCESSORIES ON ALL VEHICLES.

3.341 WINDSHIELD WIPER. — Every motor vehicle having a windshield shall be equipped with at least one windshield wiper for cleaning rain, snow, or other moisture from the windshield in order to provide clear vision for the driver.

3.342 DEFROSTING DEVICE. — Every motor vehicle which is equipped with a windshield, when operating under conditions such that ice or frost would be likely to collect on the windshield, shall be equipped with a device or other means for preventing or removing such ice or frost.

3.343 REAR-VISION MIRROR.—Every truck, bus, and tractor shall be equipped with at least one rear-vision mirror, firmly attached to the motor vehicle and so located as to reflect to the driver a view of the highway to the rear.

3.344 HORN.—Every truck, bus, and tractor shall be equipped with a horn and actuating elements which shall be in such condition as to give an adequate and reliable warning signal.

3.345 FUEL CONTAINERS.

3.3451 *Fuel container not to project.*—No part of any fuel tank or container or intake pipe shall project beyond the sides of the motor vehicle.

3.3452 *Location of fuel container on bus.* —The intake pipe of any fuel tank or container, or any such container itself, shall not be located within or above the passenger-carrying portion of any bus.

3.3453 *Fuel containers of substantial construction.*—Every fuel tank or container supplying fuel for the propulsion of any motor vehicle shall be of substantial construction free from leaks and securely attached to the vehicle in a manner which constitutes good practice.

3.346 COUPLING DEVICES.

3.3461 *Mounting of fifth wheel.*—The lower half of every fifth wheel mounted on any tractor or dolly shall be securely and permanently affixed to the frame thereof by U-bolts or by other means providing at least equivalent security.

3.3462 *Securing of fifth wheel parts.*—The upper half of any fifth wheel shall be fastened as securely to the semitrailer as is required for the securing of the lower half to a tractor or dolly.

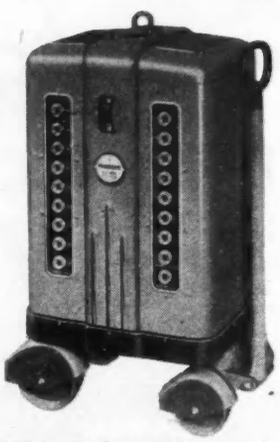
3.3463 *Adequate locking of fifth wheel.* —Locking means shall be provided in every fifth wheel mechanism such that the upper and lower halves may not be separated without its manual release. A release mechanism actuated by the driver from the cab shall be deemed to meet this requirement.

3.3464 *Tow-bar.*—Every full trailer shall be equipped with a tow-bar which shall

(TURN TO PAGE 182, PLEASE)

cut DAYS TO HOURS

and Hours to Minutes



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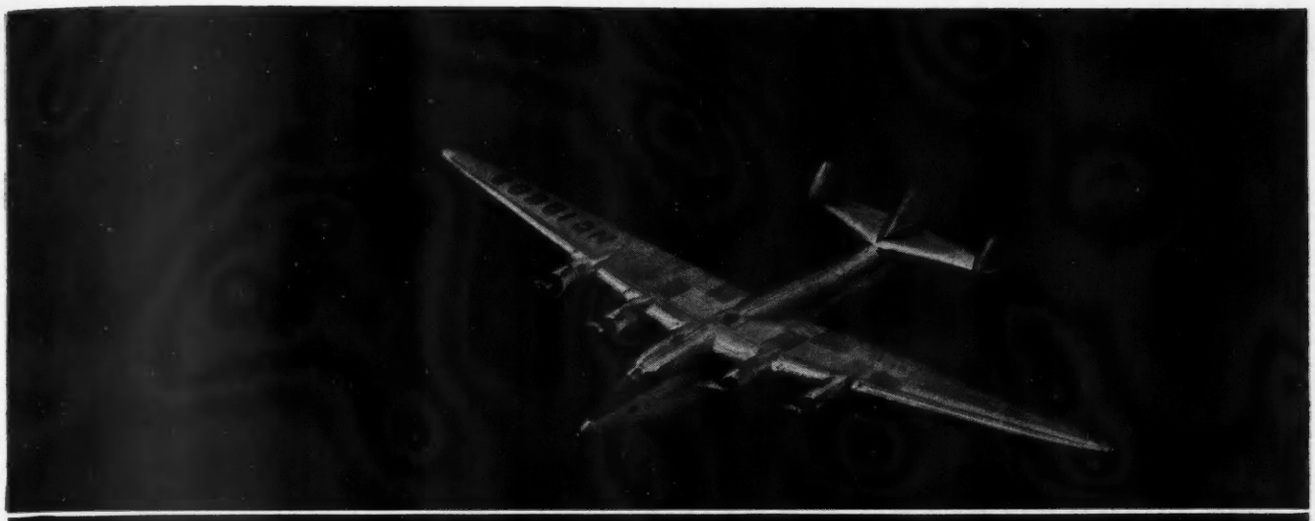

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WOLF'S HEAD

MOTOR OIL AND LUBES

ICC SAFETY REGULATIONS

(CONTINUED FROM PAGE 180)

be structurally adequate for any weight drawn, properly mounted, without excessive slack but with sufficient play to allow for universal action of the connection, and provided with a suitable locking means to prevent accidental separation of the towed and towing motor vehicles.

3.3465 *Tracking.*—The tow-bar and its connections shall be so designed, constructed and installed, and the full trailer shall be so designed and constructed as to insure that the full trailer will follow substantially in the path of the towing vehicle and without whipping or swerving from side to side.

3.3466 *Safety chains.*—Every full trailer shall be coupled with safety chains (stay chains or cables) to the motor vehicle by which it is to be towed, which devices together with their means of attachment shall be adequate to prevent the separation of the towed and towing vehicles in the event of failure of the tow-bar.

3.347 TIRES.—Tires shall be provided on every motor vehicle adequate to support the maximum gross weight thereof.

3.348 DRIVE SHAFT (PROPELLER SHAFT) PROTECTION FOR BUSES.—Where the drive shaft (propeller shaft) of any bus extends lengthways under the floor thereof, it shall be protected by means of at least one U-shaped guard or bracket at that end of the shaft which is provided with a sliding connection (spline or other such device) to prevent the whipping of the shaft in the event of failure thereof or of any of its component parts. A shaft contained within a torque tube shall not be deemed to require any such device.

3.349 EMERGENCY PARTS AND ACCESSORIES REQUIRED.

3.3491 *On every bus, truck or tractor there shall be—*

(a) At least one fire extinguisher, of a type inspected and labelled by Underwriters' Laboratories, Inc., 207 E. Ohio Street, Chicago, Ill., under Classification B, and utlizing an extinguishing agent which does not need protection from freezing, properly filled and securely mounted in a bracket. (Minimum size: one-quart carbon tetrachloride type, or two-pound carbon dioxide type.) This requirement shall not apply to any taxicab.

(b) One red lantern, when projecting loads are carried.

(c) One red cloth flag, not less than 12 inches square, when projecting loads are carried.

(d) At least one spare electric bulb for each kind of electric lamp used for any of the lighting devices required by these regulations.

(e) At least one spare electric fuse of each kind and size used for any of the electric lighting circuits on the motor vehicle.

(f) One set of tire chains. for all vehicles likely to encounter conditions requiring them.

(g) Three flares or three red electric lanterns; each flare (liquid-burning pot torch) or red electric lantern shall be capable when lighted of being seen and distinguished at a distance of 500 feet under normal atmospheric conditions at night time; each flare (pot torch) shall be capable of burning for not less than 12 hours in 5-miles-per-hour wind velocity, capable of burning in any air velocities from zero to 40 miles per hour, substantially constructed so as to withstand reasonable shocks without leaking, and shall be carried in a metal rack or box; each red electric lantern shall be capable of operating continuously for not less than 12 hours and shall be substantially constructed so as to withstand reasonable shocks without breakage.

(h) At least three red-burning fusees (if carrier elects to carry and use flares as warning signals); each fusee shall be made in accordance with specifications of the Bureau of Explosives, 30 Vesey Street, New York, N. Y., and so marked, and shall be capable of burning at least 15 minutes.

NOTE.—*Flares (pot torches), fusees, oil lanterns, or any signal produced by a flame, shall not be carried or used as warning signals for motor vehicles used in*

(TURN TO PAGE 184, PLEASE)

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MOTOR STANDARD PRODUCTS
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Today— our slogan carries a vital message

THE materials that go into ignition parts are practically all listed as "Strategic." For that reason alone it is sound judgment, when making replacements, to use parts that give the *longest* service.

The answer is "Blue Streak," the ignition parts line that offers time-defying resistance to wear. The line that gives the commercial car owner assurance of uninterrupted ignition service, continued far beyond ordinary limits.

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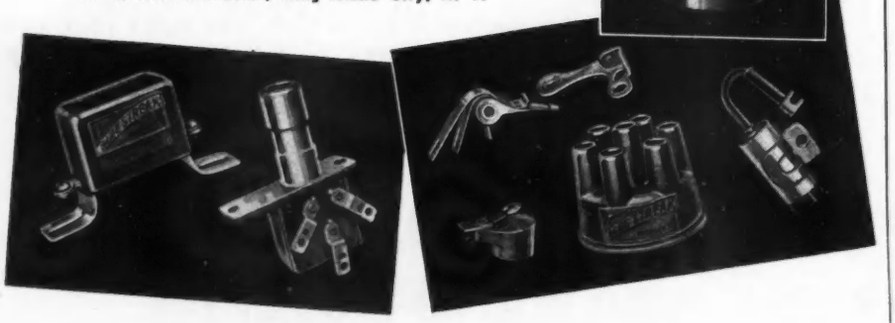

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RUSCO developed these Brake Blocks for heavy duty fleets

Think of the braking strain when hurtling tons in the form of capacity loaded trucks or buses must be stopped and stopped quickly!

That's the problem RUSCO thought about . . . and solved . . . as long ago as 1918 when RUSCO specialists developed, tested and perfected the original moulded brake lining for extra-rugged service. That was the famous RUSCO "Durak."

But trucks, buses grew heavier, loads more weighty, highway schedules more swift. So, to meet new and greatly augmented braking stresses, RUSCO engineers again pioneered.

Out of the sturdy, long-wearing RUSCO "Durak" . . . as logically as one day follows another . . . came the present husky RUSCO moulded Blocks . . . now a byword for dependability wherever giant loads are hauled. Note: These non-scoring and long-wearing Blocks are completely drilled for all popular makes of trucks.

Built to "stand the gaff", too, is RUSCO's complete line of patented fused-fabric clutch facings, the choice of America's leading car and truck manufacturers. Again and again, these celebrated clutch facings have demonstrated their superiority over the ordinary kind. (Letters proving this sent upon application.)

If you operate single trucks, trucks and trailers, or big, heavy duty fleets, you can "keep 'em rolling" by trusting to RUSCO. Now, more than in ordinary times, it pays to "play safe" this RUSCO way.

See Your Jobber For RUSCO Bus and Truck Linings, Facings and Blocks

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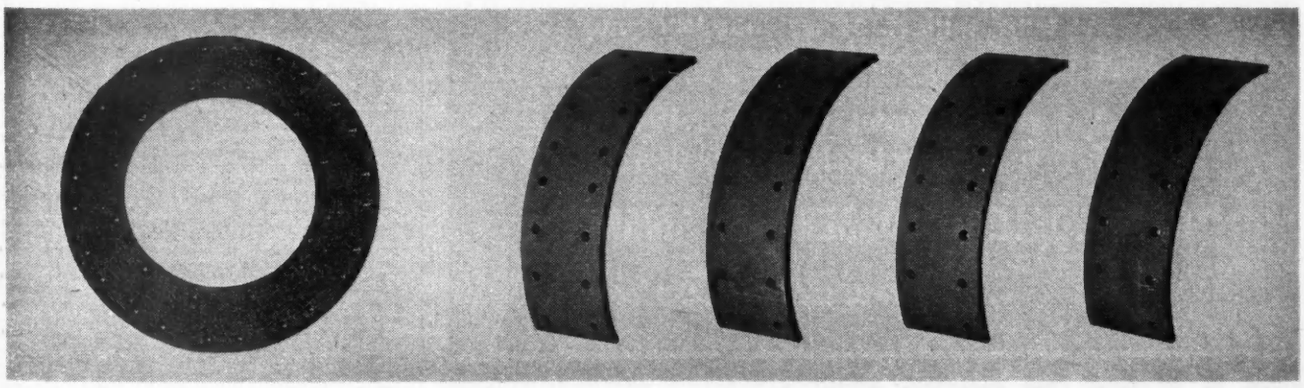


Favorite of car and truck manufacturers are these long-wearing RUSCO Fused Fabric Linings.

The Famous RUSCO "Durak" was the "grand-daddy" of this modern husky RUSCO Brake Block.

ICC SAFETY REGULATIONS

(CONTINUED FROM PAGE 182)

the transportation of inflammable liquids or inflammable compressed gases in cargo tanks; but in lieu of such flares and fusees, three red electric lanterns shall be carried. See Rule 2.232.

(i) At least two red cloth flags, not less than 12 inches square, with standards.

3.3492 *On every bus there shall be—*

(a) All items listed under Rule 3.3491 and in addition:

(b) One metal first-aid kit, heavy duty 10-unit type.†

(c) One hand ax.

PARTS AND ACCESSORIES REQUIRED ON NEW VEHICLES

[Acquired on and after Jan. 1, 1940]

3.4 ADDITIONAL EQUIPMENT REQUIRED ON NEW VEHICLES.—Every new motor vehicle acquired by a motor carrier on and after Jan. 1, 1940,* shall in addition to the requirements hereinbefore set forth, be at all times equipped as follows:

3.41 LIGHTING DEVICES ON NEW VEHICLES.

3.411 ELECTRIC LAMPS.—All lamps required by these regulations to be securely and permanently affixed to any new motor vehicle shall be electric.

3.412 DUAL OR MULTIPLE BEAM HEAD LAMPS.—Head lamps on any new motor vehicle shall be of the dual or multiple beam type.

3.413 ADEQUATE WIRING AND CONNECTIONS.—Each piece of electrical equipment on any new motor vehicle, except high-tension ignition circuit, shall be connected to the source of its power with suitably insulated stranded wire of electrical conductivity not less than the equivalent of No. 16 B & S gage solid copper wire. This shall not be so construed as to prohibit the use of the frame or other metal parts of such motor vehicle as a return ground system. The wiring and all connections and contacts, except the starter circuit, shall in any event be such that, with all electrical devices on the motor vehicle, except the starter, in operation and the generator operating at its maximum output, the voltage drop to any lamp or other device shall not be excessive.

3.42 BRAKES ON NEW VEHICLES.

3.421 BRAKES REQUIRED ON ALL WHEELS.—Every new motor vehicle shall be equipped with brakes on all wheels, excepting any full trailer, semitrailer, or pole trailer of a gross weight not exceeding 3,000 pounds; provided, however, that the gross weight of any such full trailer or 4-wheel pole trailer without brakes shall not exceed 40 per cent of the gross weight of the towing vehicle, and that the gross weight of any such semitrailer or two-wheel pole trailer without brakes shall not exceed 40 per cent of the gross weight of the towing vehicle when connected to the semitrailer or two-wheel pole trailer. (*See illustration on page 96.*)

3.422 AUTOMATIC APPLICATION OF BRAKES UPON BREAKAWAY.—Every new full trailer, semitrailer, and pole trailer (except those weighing 3,000 pounds gross or less), shall be equipped with brakes of such a character as to be automatically applied upon break-away from the towing vehicle, and means shall be provided to maintain application of the brakes in such case for at least 15 minutes.

3.4 SAFETY GLASS ON NEW VEHICLES.

3.431 SAFETY GLASS IN CERTAIN SPECIFIED

(TURN TO PAGE 186, PLEASE)

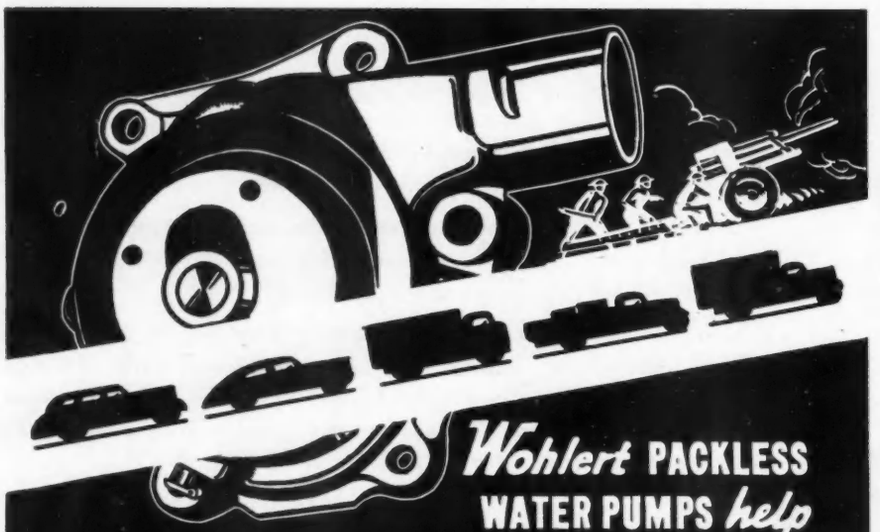
* Oct. 15, 1940 for Private Carriers.

† Specification 269-A, June 8, 1938, Branch of Supply, Procurement Division, Treasury Department, Washington, D. C., Specification for Kits, First-Aid, illustrates the type of first-aid kit meeting the requisites of this rule. The requirements and contents of a 10-unit first-aid kit in the above specification, quoted in part, are as follows:

E-2b (1)—Class 1 (10-unit).—The case shall measure approximately 8 by 4¼ by 2¼ inches and shall be made of sheet steel not less than 0.037 inch in thickness. All seams and joints shall be welded. The cover shall be attached to the base by means of a continuous piano hinge, spot-welded in place. The case shall be so designed that the cover shall open to an angle of 90 to 100 degrees with the base, and at that point a substantial stop be provided; such stop shall in no manner interfere with the smooth operation of the cover.

E-2b (1) e—Contents.—Each case shall be provided with a contents label placed on the inside of the cover, giving brief instructions for first-aid treatment and arrangement of contents. The case shall contain the following: (See also paragraph E-3 for detailed specifications as to the content requirements.)

4-inch bandage compresses, 1 package. 2-inch bandage compresses, 1 package. 1-inch adhesive compresses, 2 packages. 40-inch triangular bandage, 1 package. Burn ointment, 1 package. Ammonia inhalants, 1 package. Iodine applicators, 1 package. Wire splint, 1 package. Tourniquet and forceps, 1 package.



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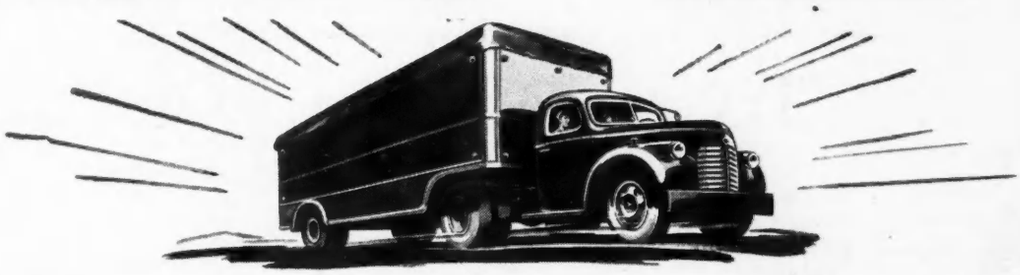

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To keep your engine delivering "like-new" performance, every part and parcel of its Auto-Lite* ignition system has been built in duplicate for you. Ask for original factory parts. They can be furnished by your neighborhood parts supply house or one of the thousands of registered Auto-Lite Service Stations near you.

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***LEADING CAR, TRUCK AND TRACTOR MAKERS SPECIFY AUTO-LITE EQUIPMENT**

ICC SAFETY REGULATIONS

(CONTINUED FROM PAGE 184)

OPENINGS.—Whenever glass is used in the windshield and in the window next to the driver in a bus,, truck or tractor; or in the doors and rear windwos of a bus; or in the rear window of the driving compartment of a truck or tractor, it shall be safety glass which shall conform to the requirements contained in the "American Standard, Safety Code for Safety Glass for Glazing Motor Vehicles Operating on Land Highways, Z 26.1—1938," approved March 7, 1938, by the American Standards Association, 29 West 39th Street, New York, N. Y.

3.432 CASE-HARDENED GLASS PROHIBITED.—Case-hardened glass shall not be used in any windshield, door or window opening of any motor vehicle.

3.44 MISCELLANEOUS PARTS AND ACCESSORIES ON NEW VEHICLES.

3.441 SPEEDOMETER.—Every new bus, truck, and tractor shall be equipped with one speedometer or tachometer which shall be operative with reasonable accuracy.

PART 5—HOURS OF SERVICE OF DRIVERS

Rule 1

As used in these regulations:

(*a*) The term "motor vehicle" means any vehicle, machine, tractor, trailer, or semitrailer propelled or drawn by mechanical power and used upon the highways in the transportation of passengers or property, or any combination thereof determined by the Commission, but does not include any vehicle, locomotive, or car operated exclusively on a rail or rails.

(*b*) The term "driver" means any individual who drives in transportation in interstate or foreign commerce any motor vehicle as defined in paragraph (a) above.

(*c*) A driver is on duty from the time he begins to work or is required to be in readiness to work until the time he is relieved from work and all responsibility for performing work. Time spent by a driver resting or sleeping in a berth as defined in paragraph (*g*) of this rule shall not be included in computing time on duty.

(*d*) The term "drive or operate" includes all time spent on a moving vehicle and any interval not in excess of 10 minutes in which a driver is on duty but not on a moving vehicle. For the purpose of computing an interval in excess of 10 minutes, all stops made in any one village, town or city may be computed as one if the driver has not driven or operated the motor vehicle more than 10 miles in such village, town, or city. The term "drive or operate" does not include time spent resting or sleeping in a berth as defined in paragraph (*g*) of this rule.

(*e*) The term "week" means any period of 168 consecutive hours beginning at the time the driver reports for duty, as defined in paragraph (*c*) of this rule.

(*f*) The term "24 consecutive hours" means any such period starting at the time the driver reports for duty, as defined in paragraph (*c*) of this rule.

(*g*) The term "berth" means a berth or bunk on the motor vehicle which is properly equipped for the purpose of sleeping, including springs and a mattress, or an inner-spring mattress, pillow, adequate bed clothing, adequate ventilation, and ready means of entering and leaving the berth.

(*h*) Where any other terms used in these regulations are defined in section 203 (a) of the Motor Carrier Act, 1935, such definitions shall be controlling. Where terms are used in the regulations which are neither defined herein nor in said section 203 (a), they shall have the ordinary practical meaning of such terms.

Rule 2

Every motor carrier and his or its officers, agents, employes, and representatives shall comply with the following regulations, and every such motor carrier shall require that his or its officers, agents, employes, and representatives shall be conversant with these regulations.

Rule 3

(*a*) No carrier subject to these regulations shall permit or require any driver in his employ to remain on duty, as defined in paragraph (*c*) of rule 1, for a total of more than 60 hours in any week, as defined in paragraph (*e*) of rule 1; provided, however, that carriers operating vehicles on every day of the week may permit drivers in their employ to remain on duty for a total of not more than 70 hours in any period of 192 consecutive hours. Provided, further, however, that this rule shall not apply with respect to drivers of motor vehicles engaged solely in making deliveries for retail stores during the period from December 10 to December 25, both inclusive, of each year. Also provided, that this rule shall not apply with respect to drivers of motor vehicles controlled and operated by any farmer and used in the transportation of his agricultural commodities and products thereof, or in the transportation of supplies to his farm; nor shall it apply with respect to driver-salesmen employed by private carriers of property who devote more than 50 per cent of their time to selling and less than 50 per cent to such work as driving, loading, unloading, and the like.

(*b*) Except under conditions set forth in rule 6 (*a*) and (*b*) hereof, no carrier subject to these regulations shall permit or require a driver in his employ to drive or operate for more than 10 hours in the aggregate in any period of 24 consecutive hours, unless such driver be off duty for 8 consecutive hours during or immediately following the 10 hours aggregate driving and within said period of 24 consecutive hours; provided, however, that two periods of resting or sleeping in a berth, as defined in paragraph (*g*) of rule 1, may be cumulated to give the aforesaid total of 8 hours off duty.

Provided, however, that no driver of a motor vehicle controlled and operated by

(TURN TO PAGE 239, PLEASE)

Try

PERFECT SEAL

at no cost

On Your Next

Gasket Job

Pages of advertising won't tell the complete story of PERFECT SEAL'S superiority, as well as one trial by you . . . in your own shop. So . . . we'll send you a sample tube of PERFECT SEAL . . . enough for a complete head gasket job . . . at no cost. Send the coupon today, and learn for yourself why most truck and automobile manufacturers use PERFECT SEAL for production line assembly, and recommend it to their dealers and distributors.

PERFECT SEAL works perfectly on head, pan and water plug gaskets; radiator and water hose connections; spark plug and stud bolt threads. TRY PERFECT SEAL . . . YOU'LL BE CONVINCED.

P. O. B. MFG. CO., INC., CINCINNATI, O.

Send me a free tube of your Perfect Seal. I'll try it at no cost to me.

NAME .....

ADDRESS..... CITY.....

JOBBER'S NAME .....

C.C.

TIRE MAINTENANCE TIPS

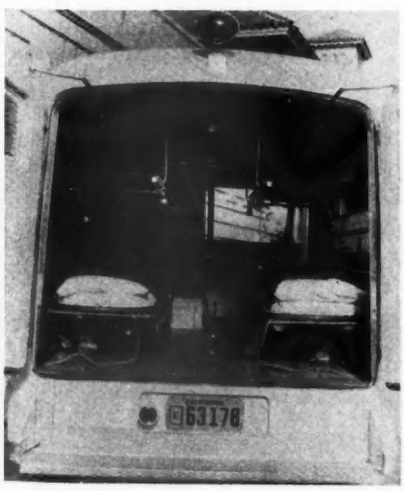
(CONTINUED FROM PAGE 57)

thoroughly for evidence of a leak. If one cell requires less water than the others, examine for evidence of gassing on charge and check the gravity readings with the other cells. If these are out of line, the battery should be removed for a complete examination of the cell. The amount of water added is an indication of the charge and discharge rate of a battery. In batteries connected in parallel this is a point to be carefully observed. If one battery takes more water than the other, promptly check all switches and connections for trouble.

3. At every inspection wipe the battery top and sides with a rag moistened with water. During major inspections the battery should be removed and both battery and box or compartment should be thoroughly cleaned with a solution of ammonia or bicaronate of soda (one pound of soda to one gallon of water), then rinsed with plain water.

Terminals should be kept clean and bright and a thin coating of grease or vaseline applied to the connections.

4. A record should be kept of the date and amount of water added. In this record should be included the gravity readings at each inspection, the regulator setting and the adjustments made.



Six IHC ½-ton units like the above are used by Los Angeles hospitals to serve 1,500,000 people in a 450-sq. mile area. A standard Metro body was converted without any major alterations. Note views inside and out

These Distributors are equipped to CALIBRATE HANDY GOVERNORS

Alabama, Birmingham, Birmingham Electric Battery Co.

Arizona, Phoenix, Charlie C. Jones

California, San Francisco, H. G. Makelim Magneto Rep. Co.

California, Los Angeles, J. F. Dixon Co.

Colorado, Denver, Central Supply Co.

Connecticut, Bridgeport, H. G. Davis, Inc.

D. C. Washington, Creel Brothers

Florida, Miami, Electrical Equipment Co.

Florida, Orlando, Bailey Motor Equipment Co.

Georgia, Atlanta, Auto Electric & Magneto Co.

Illinois, Chicago, Illinois Auto Electric Co.

Indiana, Indianapolis, Indiana Carb. & Brake Service

Kentucky, Louisville, Raybestos-Louisville Brake Service

Louisiana, New Orleans, A. C. Suhren Co.

Maryland, Baltimore, Ditch, Bowers & Taylor, Inc.

Massachusetts, Boston, H. G. Davis, Inc.

Massachusetts, Springfield, E. B. Atmas Co.

Michigan, Detroit, Motor Car Service

Minnesota, Minneapolis, Reinhard Brothers Co.

Missouri, Kansas City, E. S. Cowie Electric Co.

Missouri, St. Louis, Motor Electric Service

Nebraska, Omaha, Zenith-Nixon Co.

New Jersey, Newark, Tire Trading Company

New York, New York, Durham Co., Inc.

New York, Buffalo, The Battery & Starter Co.

New York, Syracuse, Durham Co., Inc.

North Carolina, Charlotte, Carolina Rim & Wheel Co.

Ohio, Cincinnati, J. W. Harris

Ohio, Toledo, Toledo Auto Electric Co.

Ohio, Columbus, Hughes-Scott-Frank Co.

Ohio, Dayton, H. C. Hasseggi Company

Ohio, Cleveland, Cleveland Ignition Co.

Oregon, Portland, The Stevens Corporation

Pennsylvania, Philadelphia, Lacy L. Redd & Co., Inc.

Pennsylvania, Pittsburgh, Automotive Ignition Co.

Rhode Island, Providence, Thorpe Automotive Co.

Tennessee, Memphis, Automotive Electric Service

Texas, Dallas, J. J. Gibson Co.

Utah, Salt Lake City, Mendenhall's Auto Parts Co.

Virginia, Richmond, A. R. Tiller, Inc.

Washington, Seattle, Automotive Service Co.

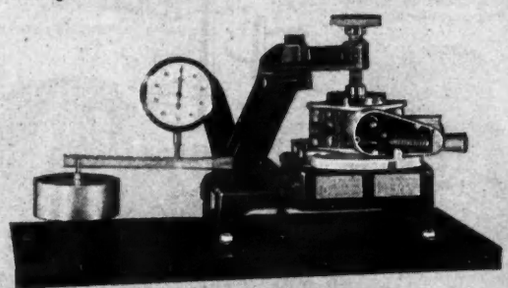
Washington, Spokane, Chase Engineering Co.

W. Virginia, Charleston, MacFadden Ignition Co.

Wisconsin, Milwaukee, Wisconsin Magneto Co.

Ontario, Toronto, Auto Electric Service Ltd.

An automotive governor is a precision device. Its accuracy and efficiency depend upon proper calibration. Whenever governors are serviced, whether involving the replacement of worn parts or merely cleaning, accurate recalibration is essential.



KING-SEELEY CORPORATION • Ann Arbor, Michigan

HANDY *Visible Action* GOVERNOR

World's Largest Manufacturers of Automotive Governors

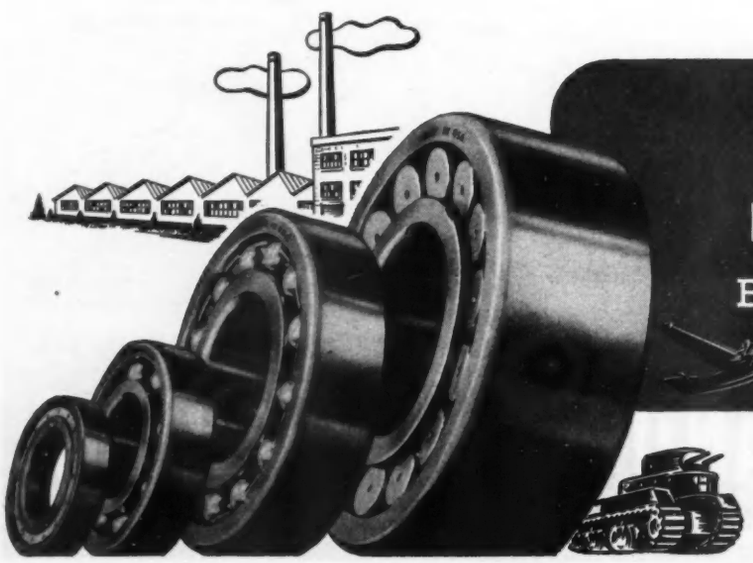
Keep 'Em Young With SKF

BUILT BY BROCKWAY MOTOR CO., INC.

"How are those trucks I bought two years ago standing up?" is a question more than one fleet owner will be asking in 1942. He didn't need new trucks when he could get them, and trade-in's on new equipment just aren't in the cards. If he's been using SKF Bearings for replacement, chances are he'll find rolling parts are properly located . . . plenty of mileage has been accumulated at low costs . . . and his equipment is in good working condition. For that he can thank his SKF Distributor who supplied not only the bearings but advice on how to install and maintain them. 5032

SKF INDUSTRIES, INC., FRONT ST. & ERIE AVE., PHILA.

BUY *Defense* **BONDS**



SKF

BALL AND ROLLER BEARINGS

ICC SAFETY REGULATIONS

(CONTINUED FROM PAGE 186)

any farmer and used in the transportation of his agricultural commodities and products thereof, or in the transportation of supplies to his farm, shall be permitted or required to drive such motor vehicle for more than an aggregate of 50 hours in any week, as defined in paragraph (*e*) of rule 1 of said regulations; provided further, however, that no driver-salesman employed by a private carrier of property who devotes more than 50 per cent of his time to selling and less than 50 per cent to such work as driving, loading, unloading, and the like, shall be permitted or required to drive or operate a motor vehicle for more than an aggregate of 50 hours in any week as defined in paragraph (*e*) of rule 1 of said regulations.

Rule 4

No carrier subject to these regulations if himself a driver shall remain on duty or drive for longer periods than those prescribed in rule 3 hereof for employed drivers.

Rule 5

(*a*) Each carrier subject to these regulations shall require that a driver's log in duplicate shall be kept by every driver in his employ who operates a motor vehicle engaged in transportation in interstate or foreign commerce, and, if himself an owner-driver, shall keep such a log. Entries in said driver's log shall be made by the driver, and shall show the place of origin and destination of the trip, the times of reporting for duty and of going off duty, the periods of driving or operating and other work, and any other information found desirable; provided, however, that the foregoing provisions of this rule shall not apply to drivers engaged in the transportation of passengers or property in interstate or foreign commerce wholly within a municipality or between contiguous municipalities or within a zone adjacent to and commercially a part of any such municipality or municipalities; and provided further, however, that the foregoing provisions of this rule shall not apply to any driver engaged in the transportation of passengers in interstate or foreign commerce while on a regular schedule over a regular route, mainly in urban and suburban areas, and when such regular route is not longer than 35 miles from the garage or terminal to the point or place where the motor vehicle starts on its return trip; provided further, however, that the second proviso hereof shall apply only to drivers employed by carriers who maintain records which show the total number of hours of driving per day, the total number of hours on duty per day, and the total number of hours on duty per week of each such driver.

Provided further, however, that this rule shall not apply with respect to drivers of farm trucks or to drivers of motor vehicles of private carriers of property commonly called work trucks or work cars which are

(TURN TO PAGE 240, PLEASE)

OIL PROTECTION Every Mile

Clean Oil Improves Lubrication—
Cuts Engine Wear—Saves Gas and Oil

● Every mile you run brings you nearer an engine overhaul job—*if* your oil is not kept clean because dirty oil may lead to engine failure.

Every mile wastes gas and oil *if* the motor is sluggish and inefficient due to wear.

Cleaning your oil as you drive—keeping it clean—is so easily accomplished by MICHIANA Duo-Flo Oil Filters that their cost is quickly paid and the life of your motor greatly lengthened.

The Re-Packable type Filter offers the lowest servicing cost. Only the filtering material, MICHIANA Wastex, need be replaced in the element.

The Replaceable cartridge or "throw-away" type is similar in the excellence of its performance but in this type the complete cartridge or element is replaced when servicing.

Standard models are made for all standard engine displacements and capacities—with other types for both gasoline and Diesel engines of special capacities.

Start saving your engines now—write for Bulletin 839.

The replacement of the used "Wastex" makes the filter as good as new. Simple, inexpensive, quick.

With the Replaceable Cartridge Type, the used cartridge is thrown away and replaced by a new one.

Typical filter with 12 gage drawn steel shell and cast iron base casting.

MICHIANA PRODUCTS CORPORATION
Michigan City, Indiana

MICHIANA
Duo-Flo OIL FILTERS

TIRE KILLING!

But

It's Easy to Stop!

Here's a book you need for your wartime job of "keeping 'em rolling." Ask for your copy of the "Fleet Operators Cleaning Handbook."

Nothing's so hard on rubber tires as to have them standing on the grease and oil of service garage floors. But, nothing's so easy to overcome. You can get clean floors and keep them clean at negligible cost with

MAGNUS CEMENT CLEANER

It is safe, non-poisonous and non-inflammable. It is thorough and speedy. And, it whitens and hardens the floors it cleans.

There's no reason for tires to be robbed of useful service miles by grease or oil on your shop floors when you keep them clean at a top cost of 3c per 100 square feet. (Less than that when you make the job a routine!)

MAGNUS CHEMICAL COMPANY

Manufacturers of Cleaning Materials, Industrial Soaps, Metallic Soaps, Sulfonated Oils, Emulsifying Agents and Metal Working Lubricants.

38 South Avenue Garwood, N. J.

MAGNUS CLEANERS

ICC SAFETY REGULATIONS

(CONTINUED FROM PAGE 239)

especially designed or equipped for use and are used solely in the construction or maintenance of their plants and equipment.

(*b*) Each carrier shall make monthly reports to the Bureau of Motor Carriers, Interstate Commerce Commisison, Washington, D. C., prior to the fifteenth day of each succeeding month, of every instance where a driver has been required or permitted to be on duty or to drive or operate for hours in excess of those prescribed by these regulations, and shall fully explain the reasons for and circumstances surrounding such violations. Such reports shall be in writing and sworn to. (This section not applicable to any private carrier of property!)

Rule 6

(*a*) In case of snow, sleet, fog, or other adverse weather conditions, or in case the highways are covered with snow or ice, or presence of unusual adverse road and traffic conditions, a driver may be permitted and required to drive or operate a motor vehicle for not more than 12 hours in the aggregate in any period of 24 consecutive hours in order to complete his run, without being off duty for a period of 8 consecutive hours as provided by rule 3, and this longer period of driving is permitted even though conditions named herein are known to the employer before the trip is begun.

(*b*) If a driver is permitted or required under the provisions of subdivision (*a*) of this rule to drive in excess of 10 hours in the aggregate in any 24-hour period without being off duty for a period of 8 consecutive hours during or immediately following the period of 10 hours driving and within said period of 24 consecutive hours, a report must be made immediately to the Commission, addressed to the district office of the Bureau of Motor Carriers of the district in which the carrier's headquarters is located, and such report shall contain a full and correct statement of the conditions which necessitated the longer period of driving. (This section not applicable to any private carrier of property!)

(*c*) In case of any emergency a driver may complete his run without being in violation of the provisions of these regulations, if such run could reasonably have been completed without such violation.

Rule 7

These regulations shall not apply to any carrier subject thereto when transporting passengers or property to or from any section of the country with the object of providing relief in case of earthquake, flood, fire, famine, drought, epidemic, pestilence, or other calamitous visitation or disaster.

Duplex Trucks

Heavy Duty and Special Motor Trucks

Designed Especially For

Road Maintenance, Construction and Snow Removal.

DUPLEX TRUCK CO.

LANSING MICHIGAN

THERE'S ONLY ONE

BURN-OUT PROOF DIRECTIONAL SIGNAL SWITCH

In complete sets of Signal-Stats or as a replacement switch—ASK YOUR JOBBER

SIGNAL-STAT CORPORATION

68 JAY STREET BROOKLYN, N. Y.

STOP and HOLD Your Truck in One Operation

You're safe to stop uphill or down-hill with AUTOMATIC BRAKE CONTROL. Makes an emergency brake out of your hydraulic brake system—holds on all four or six wheels. Will hold the heaviest load without slipping. Perfect, smooth chatterless getaway. Operates from button on dash. *Ask your dealer or write*

AUTOMATIC BRAKE CONTROL CO.

DELAWARE, OHIO

One of the most complete lines in the business—each tire built to give you more miles for less money.

THE GENERAL TIRE & RUBBER CO.

AKRON, OHIO

In Canada—The General Tire & Rubber Co. of Canada, Limited, Toronto, Ontario

GENERAL TRUCK TIRES

I.C.C. Investigating Package Delivery Plan

The law enforcement section of the Bureau of Motor Carriers has charged that contract arrangements between 51 common carriers and Chain Deliveries Express of New York City was a violation of the Federal law. The Chain Deliveries organization took over from the U. S. parcel post system the job of providing delivery service between stores the F. W. Woolworth Co. Chain Deliveries acts as the agent for the 51 carriers who actually truck the packages.

NEWSCAST

(CONTINUED FROM PAGE 162)

New Appointments, Objectives Announced by Safety Foundation

Paul G. Hoffman, president of the Automotive Safety Foundation, has been named chairman of the board and treasurer. Pyke Johnson, formerly executive vice-president of the Automobile Manufacturers Association, succeeded Mr. Hoffman as president. Norman Damon, director of the foundation, was elected vice-president.

Three primary objectives were recently adopted by the Foundation's operating committee. They are:

(a) Enlisting the co-operation of motor vehicle owners in the conservation and efficient use of vehicles.

(b) Conservation of productive manpower, man hours and irreplaceable automotive vehicles and materials through intensified accident prevention measures.

(c) Participation in the development of a post-war highway program designed to provide useful employment quickly at the termination of the war and to acquire vital highway facilities for post-war service.

The Army's new 240 mm. Howitzer, largest mobile field piece ever built, was towed from Wisconsin to Aberdeen, Md., by this six-wheeled Mack. The big 100-ton gun was hauled in three sections

Barrett Expands Plant

The Barrett Equipment Co., St. Louis, Mo., has recently acquired a new building which gives the company an additional 12,000 sq. ft. of floor space. This is the third expansion in two years by this brake-tool and equipment manufacturer.

Truckers Curb Freight Pick-Ups

In an effort to conserve tires, the Nashville Motor Freight Assoc. has placed a ban on freight pick-ups after 5:30 p.m. by commercial trucking concerns.

The Trailer Company of America added 250,000 sq. ft. of space to its production facilities when it acquired the Goodall plant shown in the photo. The company will raise output 60 per cent

Carter Service Manual

The Carter Carburetor Corp. has announced publication of the eighth edition of its "Motor Tune-Up and Carburetor Service Instructions." The manual is very complete and covers all their latest developments. Priced at $1.00.

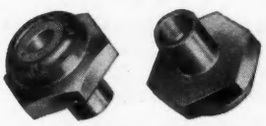
(TURN TO PAGE 242, PLEASE)

A SELF-LOCKING NUT
for every
IMPORTANT FASTENING

STANDARD-HEIGHT HEX NUTS
For all classes of bolted fastenings

ANCHOR NUTS
For riveting to structures

THIN HEX NUTS
For shear bolts with light tensile load



INSTRUMENT-MOUNTING NUTS
For control panels

TEST ELASTIC STOP NUTS on your products and equipment. Sample nuts will be furnished without cost or obligation.

ELASTIC STOP NUTS are made in more than 2500 combinations of type, size, material, finish, and thread system . . . to provide safe and economical bolted fastenings for any mechanical or electrical application.

Each nut embodies the Elastic Stop resilient non-metallic self-locking collar that assures a tight hold under all conditions of vibration, shock, and prolonged hard service.

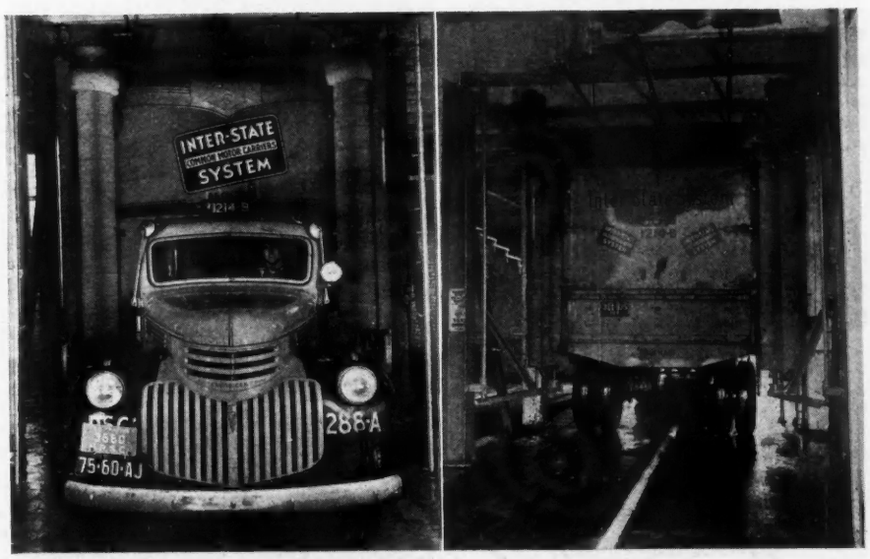
» *Catalog on request*

ELASTIC STOP NUT CORPORATION • 2349 VAUXHALL ROAD • UNION, NEW JERSEY

Elastic Stop SELF-LOCKING NUTS

"TRUCK WASHER"

MANUFACTURED EXCLUSIVELY BY
ROSS AND WHITE COMPANY
Chicago Daily News Bldg. CHICAGO, ILL.



FOR
INTER-STATE MOTOR FREIGHT SYSTEM
GRAND RAPIDS, MICH., 1941

NOW BEING DUPLICATED FOR THE WILLETT CO., CHICAGO

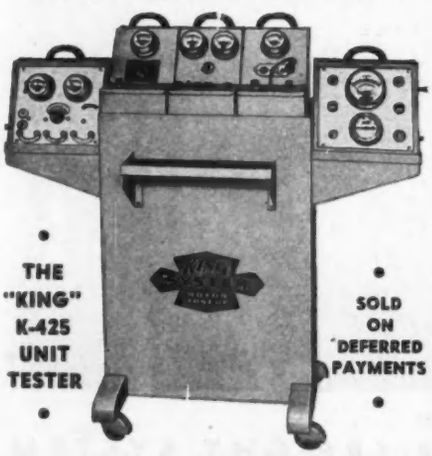
Official REPORT!

TUNE-UP will give you 17% MORE MILES per GALLON

The American Automobile Association in co-operation with the U. S. Bureau of Standards has made important tests on Gas consumption. The tests show that after proper tune-up and making the necessary minor repairs, GASOLINE MILEAGE INCREASED 17.3% ON THE AVERAGE AUTOMOBILE. The test was made on cars of all ages, conditions, and price range in proportion to the national registration.

USE "KING" TESTERS for your TUNE-UP

It is now more important than ever to keep your trucks and cars operating at maximum efficiency and INCREASE YOUR MILES PER GALLON. "KING" Testers are doing just that in thousands of repair shops in all parts of the country. We recommend our Unit Testers because they will enable you to make every conceivable motor and ignition test. You can locate trouble accurately and quickly and also tell if the job is properly done. The "KING" K-425 Unit Tester has the following five units which may be purchased separately: (1) Ignition and Cam Angle Tester; (2) Generator Voltage-Regulator Tester; (3) All-Electric Spark Plug Tester; (4) New oscillator type Condenser Tester; (5) Exhaust Gas Analyzer with vacuum and fuel pump test.



THE "KING" K-425 UNIT TESTER

SOLD ON DEFERRED PAYMENTS

Ask our Jobber or Write us Jobber's Name

The ELECTRIC HEAT CONTROL Co.
9123 INMAN AVE. CLEVELAND, OHIO
KING-Good Products Since 1914-KING

(CONTINUED FROM PAGE 241)

ICC Authorizes Merger of Eight Trucking Firms

The Interstate Commerce Commission, by a vote of seven to three, has authorized the merger of eight trucking companies, serving the entire Atlantic seaboard, as the Associated Transport, Inc., of New York. The authorization was issued despite the opposition of the Department of Justice's Anti-trust Division. Companies involved in the deal are: Arrow Carrier Corp., Paterson, N. J.; Barnwell Bros., Inc., Burlington, N. C.; Consolidated Motor Lines, Hartford, Conn.; Horton Motor Lines, Charlotte, N. C.; McCarthy Freight System, Inc., Taunton, Mass.; M. Moran Transportation Lines, Inc., Buffalo, N. Y.; Southeastern Motor Lines, Bristol, Va.; Transportation, Inc., Atlanta, Ga.

White, Stewart-Warner, Autocar Issue Profit Reports

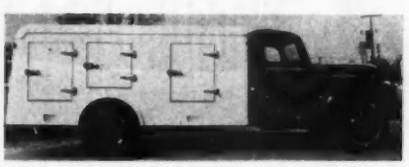
The greatest year in the company's history, both in point of dollar volume and unit sales, is revealed by the White Motor Co. and subsidiaries for the year ending December 31st, 1941. During the 12-month period, White's total sales amounted to $72,775,309, which is nearly twice the volume of 1940. The company sold 17,866 trucks, buses and military vehicles in 1941 as compared with 10,116 units the preceding year.

The company's net profit was $2,753,915, which is equal to $4.40 per share. Present intense activity and future prospects are indicated by the fact that unfilled orders amount to more than twice the company's sales volume for the entire year of 1941.

Stewart-Warner Corp. and subsidiaries reported gross sales of $53,933,908, an increase of 84 per cent over 1940 sales of $29,272,500.

In contrast to the marked increase in gross sales, the net profit of $1,656,680, after all deductions including $500,000 as a reserve for contingencies, increased by only 12 per cent over last year.

A profit of $1,492,816 for the year 1941 is indicated by the annual report of the Autocar Co., of Ardmore, Pa. This profit was equivalent to $7.27 per share of the Common stock after paying all dividends and deductions from earnings to which the Preferred stock is entitled. Robert P. Page, Autocar president, pointed out in his annual report to the stockholders, that the 1941 profit was derived in a disproportionately large way from the increased volume of commercial sales rather than from Government orders.



This insulated ice cream body was built by Murphy Body Works using Met-L-Wood which resulted in a saving of considerable weight. Capacity is 615 gal.

WGB CLAROFIERS
Are Not Cheap

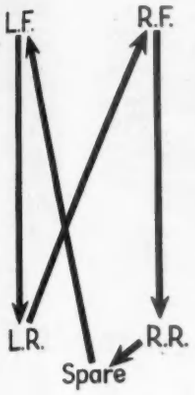
But they are the strongest, simplest, easiest-to-install oil filters money can buy. They will outlast any vehicle. Their cartridges can be renewed without tools. They are built to *fully* clarify the oil.

WGB CARTRIDGES
Are Cheap

They cost much less than an oil change, and can be replaced in a minute. They are kept inexpensive because they are a maintenance item, to be replaced when oil gets cloudy. They make the *total* cost of clarofying with WGB less than any other system. They are one of your biggest reasons for specifying WGB.

This new 2-color book explains the construction, operation and economies of clarofying oil for Gas and Diesel Engines. Write for a free copy.

WGB
OIL CLARIFIER, INC.
KINGSTON, N. Y.



The correct way to switch tires is shown in this sketch as recommended by Standard Oil of Indiana every 5,000 miles. By switching regularly and checking for proper inflation it is possible to get the most from passenger vehicle tires

Gas Preference List Includes Commercial Vehicles

Deliveries of gasoline to service stations and bulk consumers in seventeen Eastern states, the District of Columbia, Washington and Oregon were cut by one-fifth beginning March 19. The order directs service stations to give preference in supplying gasoline to physicians, surgeons, nurses, veterinarians, government-owned vehicles, *commercial vehicles* including taxicabs, and also for use in commercial, industrial and agricultural machinery and equipment. Rationing of gasoline to other customers will be left to the discretion of service station operators.

The order states that

"Suppliers and Service Stations shall deliver to any Bulk Consumer or other Person such Bulk Consumer's or Person's minimum necessary requirements of Motor Fuel for any of the above uses upon presentation by the Bulk Consumer or other Person to the delivering Supplier of the following statement, manually signed by such Person or a responsible official of the Bulk Consumer duly designated for such purpose:

"'Motor Fuel delivered pursuant to this representation will be used only for purposes authorized in paragraph (f) of Limitation Order L-70, with the terms of which Order the undersigned is familiar.'"

Tank Trucks Authorized to Transport Tax-Free Alcohol

The Bureau of Internal Revenue revised its regulations last month to authorize tank trucks to transport tax-free distilled spirits and alcohol which are to be used for explosives.

Motor carriers first must obtain permits under the Internal Revenue Code and must file bond of $50,000 per truck or not more than $200,000 per fleet. Bond cost is $10 per thousand per year. Carriers which obtain a permit and file bond may transport the products in barrels or drums, as well as tank trucks, without any additional bond requirements.

Scruggs Elected Vice-President

G. A. Bassett, president, St. Paul Hydraulic Hoist Co., Minneapolis, announces that W. S. Scruggs has been elected a vice president. He will continue his duties as general manager.

(Turn to Page 244, Please)

Help Win the War

BY MAKING *New* SAVINGS ON SERVICE, REPAIR AND MAINTENANCE WORK

FOR EXAMPLE:

Wash your buses or trucks safely the easy, low-cost Oakite way

Increased use of fleet equipment for transporting troops and war workers, hauling war supplies and meeting civilian requirements, makes it highly essential that maintenance on buses, trucks and trailers be performed as quickly as possible. "Time out" for washing units may have to be shorter . . . man-power conserved!

Put this work on a faster, easier basis by using SAFE, non-streaking Oakite materials. Painted, lacquered or enameled surfaces are not harmed. Yet oil, grease and road grime are thoroughly removed. The job is done with minimum effort, in short time, at low cost. Write for FREE 36-page manual giving details.

OAKITE PRODUCTS, INC., 26D Thames Street, NEW YORK, N. Y.

Representatives in All Principal Cities of the United States and Canada

OAKITE Specialized **CLEANING**

MATERIALS...METHODS...SERVICE — FOR EVERY CLEANING REQUIREMENT

"PERMALUX" KOLORFILM DECALCOMANIA

has been used on probably more than 250,000 trucks since 1938.

WHY?

Because so much quality is packed into it that it's the most economical truck decoration. Made with DuPont "Dulux" it should last on your fleet "For the Duration."

THE PERMALUX COMPANY

900-10 W. Lake St., CHICAGO, ILLINOIS

Permalux

"THE SIGN OF PERMANENT IDENTITY"

WASH TRUCKS-BUSES
BETTER
IN HALF THE TIME!
FOUNTAIN BRUSH
$11.95 POST-PAID

Quickest, easiest, best for fleet care. Made in hollow, cast aluminum head with four foot handle supplying continuous stream of water. Bristles sturdily set in head and flare to 8" diameter. Weighs only 2¾ pounds. This brush will easily pay for itself many times over in a few months. REFILLABLE AT SMALL COST. ORDER TODAY.

FLOUR CITY BRUSH CO.
MINNEAPOLIS, MINNESOTA
or PACIFIC COAST BRUSH CO.
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HEAVY DUTY FOR
OFF THE HIGHWAY SERVICE

— Specially Designed for —
Coal Mining—Iron Ore Mining—Copper Mining—Pit and Quarry—Logging—Oil Fields—Etc.
It Costs No More for Trucks Specially Built to Fit Your Needs. Have Our Engineers Visit and Analyze Your Operation.

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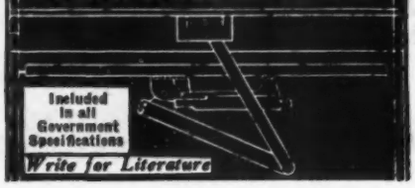
KANSAS CITY, MO.

GLOBE
SPINNING POWER
TRADE MARK REG.
BATTERIES
built for REPLACEMENT SERVICE
GLOBE-UNION INC., MILWAUKEE, WIS.

AVOID GLASS BREAKAGE AND OTHER MAINTENANCE - INSTALL YOUNG CRANKLESS REGULATORS
33 WEST 60TH ST. NEW YORK, N.Y.



(CONTINUED FROM PAGE 243)

ODT to Set Up 50 Offices

More than fifty field offices, located throughout the country, will be set up by the Office of Defense Transportation to aid in the task of co-ordinating the nation's transportation facilities for peak wartime use. The ODT is laying out a program to meet the transportation needs of the armed forces, as well as the civilian population in time of disaster. It stresses the need of full co-operation of local governments and local organizations to make its efforts successful.

The Moore-Flesher Hauling Co. of Pittsburgh designed special badges for its drivers. These show each man's picture and signature and are made in such a way that the identification cannot be removed without destroying the photo. The buttons prevent delays when trucking a load of war materials

Operators Urged to Save Anti-Freeze

Vehicle operators are advised to save their anti-freeze mixtures this spring instead of throwing them away, according to a warning issued by the Office of Price Administration. Chemicals used in making anti-freeze compounds are needed to make explosives, and for Army and Navy tank and airplane operation.

Bear Wheel Alignment Film

"An Ounce of Prevention" is the title of a new talking picture produced by the Bear Mfg. Co., Rock Island, Ill., and now being presented throughout the country by its jobbers. The film is a short course on proper wheel alignment and wheel balancing procedure and is designed as a refresher course as well as for instructing new mechanics.

Specify . . .

XACTO Printing Pump
To Check Fuel Deliveries at the Pump

AKRAFLO Fuel Consumption METER to Check Fuel Consumption at the Motor

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1360 Creighton Ave.
FORT WAYNE, INDIANA

ALWAYS DEPENDABLE

The quick-acting flux of Gardiner Acid-Core Solder permits exceptionally fast, clean work. Unusually high strength insures lasting bonds. These qualities combine with unvarying dependability to make Gardiner Solder a sound choice for maintenance and repair of motorized equipment for National Defense. Other Gardiner products with a record of dependability that recommends their use on National Defense Equipment are Solid Wire and Bar Solders . . . and Babbitt Metals.

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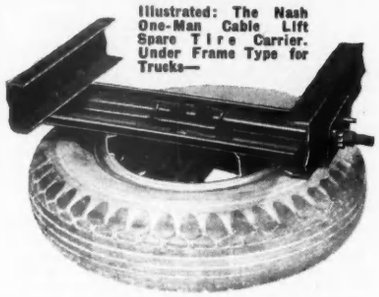
TRAILERS
and
BODIES
for all types of service
TRUCK ENGINEERING CORP.
1285 W. 70th St. Cleveland, Ohio

SPECIALLY BUILT FOR FLEET OPERATION
See your Ramco Jobber or write Ramsey Accessories Mfg. Corp., 3710 Forest Park Boulevard, St. Louis, Missouri.

Step Up Truck Capacities, with
GRICO
2-AXLE DRIVE
19842 W. Eight Mile Rd.
Detroit, Michigan

NASH
SPARE TIRE CARRIERS
now made in all types for all Trucks and Trailers



Illustrated: The Nash One-Man Cable Lift Spare Tire Carrier. Under Frame Type for Trucks—

Fleet Operators: Tire changes on the road will be more and more frequent from now on. Equip with Nash Carriers and reduce "down" time to a minimum. Ask your Truck or Trailer dealer or write us for information.

L. B. NASH & BRO. CO.
3628-30 LINCOLN AVE. CHICAGO

ATLAS
Collapsible
GATE
(CLOSED - OPEN)

Heavy galvanized wire suspended from rings which slide on a round track. "Chain Link" weave as is used in best quality fence. Protects against theft and loss. Easy to open and close. Weave collapses within itself, saving space. Rigidly made for long, hard service, yet it is so light in total weight that average gate weighs only 90 lbs. Easily installed by owner's men. Satisfaction guaranteed. Quantity Discounts—Distributors Wanted.

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"SPEED WASH" FOUNTAIN BRUSH CUTS WORK IN HALF

Eliminates all waste motion. Soaks, scrubs, and rinses in one operation. Users throughout the country. Fully guaranteed. Money refunded if brush is returned in 5 days. $9.45 postpaid, if cash accompanies order.

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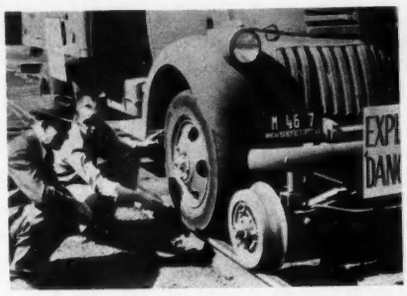

This "auto-railer" is equally at home on highway or railway. Designed by the Evans Products Co., it is equipped with special tires made by Goodrich. Transition from highway to rail takes only a few seconds. The rail assembly is operated by a hydraulic ram controlled from the driver's seat. On the rails the tires bear a portion of the load

Hollar Joins ODT

Phillip A. Hollar, special representative of the operations and maintenance department of the Association of American Railroads, has been appointed acting director of the Section of Materials and Equipment in the Office of Defense Transportation.

New Gar Wood Distributor

The H. H. Crow Equipment Co., 216 East Fourth Street, Little Rock, Ark., has been appointed authorized distributor for the hoist, body and tank divisions of Gar Wood Industries, Inc., Detroit.

January Truck Output Up

Production of commercial cars and trucks in U. S. and Canada for January of this year totalled 107,905 units for an increase of 7.9 per cent over the 100,850 vehicles produced in the same month last year. This also exceeds production for January, 1940, by 33,885 units. However, this figure is 13,000 fewer than were produced in the preceding month of December.

New Priority Forms for Automotive Distributors

Priority problems of automotive distributors, wholesalers and jobbers will be simplified by the use of a new application form which has been designed for their special use. The new form, to be known as PD-1X, will be available soon after the first of April.

(Turn to Page 246, Please)

CONSERVE OIL
Save on your total oil consumption by reclaiming your crankcase oil
with a
PETERSON
Precision Process Oil Refiner

Compact, positive in operation, easy to use and low in price. Refining cost 8¢ to 10¢ per gal. Start your oil conservation now.

Write for full particulars today.

E. W. PETERSON & CO.
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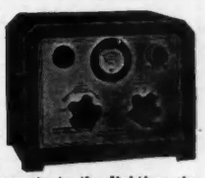
KANSAS CITY, MISSOURI

Get 'em Out Faster—
Keep 'em Rolling Longer per Ring Job!

RE-RING WITH **H** PISTON RING ***Sets***
The WEL-EVER Line

For quick installation and economical transportation insist on "H" SETS. Specially built for fleets. Ask your Jobber or write The Wel-Ever Piston Ring Co., Toledo, O.

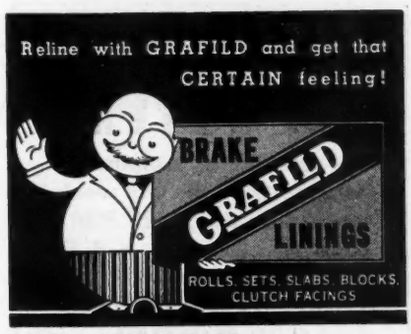
VALLEY SUPERDUTY CHARGER
Meets 1942 Conditions



Eliminate Run Down Batteries for Low Cost Battery Mileage. The new, improved, Valley-Guaranteed (two years) charger connects to the lighting circuit . . . is easy and economical to operate . . . no moving parts. Now it is easy and inexpensive to obtain long battery life by maintaining efficient battery charge. Model SG-12 charges 1 to 12 6 volt batteries.

NOW ONLY $28.00

Valley
VALLEY ELECTRIC CORP.
4221 Forest Park Blvd., St. Louis, Mo.



WORLD BESTOS CORP. Paterson, N. J.

Sterling MOTOR TRUCKS
BUILT TO "PERFORM BETTER LONGER"

Sterlings engineered for the job, plus proven units and ample built-in safety factors, are backed by more than 34 years of experience in the manufacture of quality heavy duty motor trucks. Specific models are offered for highway transportation, mining, quarrying, logging, stripping, excavating, etc.

STERLING MOTORS CORPORATION - MILWAUKEE, WIS.
Branches and Dealers in Principal Cities

APPROVED

"DANDUX" PRODUCTS

You can save and still buy "quality" when you specify Dandux. Precision craftsmanship and finer materials are your assurance of extra service and value in Dandux Canvas Products.

The major portion of our expanded facilities are now devoted to the canvas requirements of America's Armed Forces, and Uncle Sam comes first. Inquiries are welcomed, however, and we pledge the supply of all requirements to the best of our ability, subject of course, to existing regulations.

C. R. DANIELS, INC.
101 Crosby St., New York, N. Y.
Newark • Boston • Buffalo • Chicago
Cleveland • Detroit • Hartford • Milwaukee
Philadelphia • Pittsburgh • Alberton, Md.

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COLLAPSIBLE GATES
Safe . . . easy and simple to handle. Zehr Chain Link Gates are all-welded steel designed for great strength and long continuous service. They are theft-proof, rustproof and flexible.

Distributors Wanted
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"WAR REPORTERS"
An outstanding commentator reports on the war week every Saturday, 5:45 P. M., E.S.T. Red Network, N. B. C.
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SAFETY PLATE GLASS 1154-C

FRINK
SNO-PLOWS
REG. U.S. PAT. OFF.
Both "V" TYPE and ONE WAY BLADE TYPE
hand or power hydraulic control
FOR ALL MOTOR TRUCKS FROM 1½ to 10 TONS
Write for catalog 38AC and 38BC with discount to truck dealers
CARL H. FRINK, Mfr., CLAYTON, 1000 Isl., N. Y.
DAVENPORT-BESLER CORP., DAVENPORT, IOWA
FRINK SNO-PLOWS OF CAN. Ltd., TORONTO, ONT.

Automotive Council Forms War Aid Division

Formation of the Military Vehicles Division of the Automotive Council for War production to speed the output of combat and other military units by all the manufacturers of motor trucks, buses and trailers has been completed. One hundred and twenty-five representatives of 62 companies attended the organization meeting at Detroit March 24. Irving B. Babcock, president of Yellow Truck & Coach Mfg. Co., one of the largest producers of military trucks, was elected chairman of the division's governing board.

Other members of the governing board are Robert F. Black, president of White Motor Co.; P. V. Moulder, vice-president of International Harvester Co.; E. J. Bush, vice-president of Diamond T Motor Car Co.; R. I. Roberge, of Ford Motor Co.; L. J. Purdy, general manager of the Dodge Truck Division, Chrysler Corp.; W. A. Olen, president of Four Wheel Drive Auto Co., all representing the truck industry, with W. G. Sternberg, president of Sterling Motors Corp., as alternate. Charles Guernsey, of American Car & Foundry Co., was elected to represent the bus manufacturers and Harvey Fruehauf, president of Fruehauf Trailer Co., and M. J. Neeley, of Hobbs Mfg. Co., were named to represent the trailer makers.

The commercial vehicle manufacturers passed a resolution pledging their cooperation in bringing their full facilities and resources into play in providing the armed forces with combat and other military vehicles. Complete interchange of production information, time-saving techniques, product improvements and tooling short cuts has been promised. Committees were appointed in order to deal better with problems of production, engineering parts output and distribution.

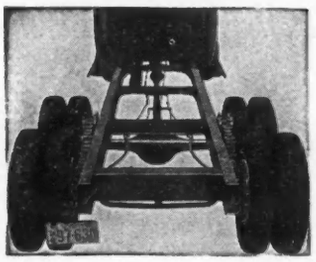
WPB to Regulate Retread Equipment Production and Sale

The War Production Board has ordered the suspension of production and delivery of tire retreading and recapping equipment except on preference-rated orders in order to prevent duplication of facilities and a consequent waste of critical materials.

The supply of existing retreading and recapping equipment, WPB found, is adequate to satisfy demand if supplemented by small quantities of additional equipment ear-marked for localities where machinery is now scarce.

LET US rebuild your Chevrolet or Ford truck for heavier duty or special service.
We have the experience, the equipment and the facilities in our nation-wide distributor organization.
TRUCKSTELL, Inc. CLEVELAND

LITTLE GIANT
AUTOMOTIVE TRUCK EQUIPMENT
TEN WHEELERS
for 1½ to 5 Ton Trucks



Greater tonnage . . . more profit. Increase carrying capacity up to 20 tons. Extend frame to any desired length. Load kept in perfect balance . . . no teeter or end-sway. Simple, sturdy, no intricate parts. Timken bearings; steel castings; hydraulic brakes. Easily installed in 3 hours. 3 sizes. LOW COST.
ONE OF THE PIONEERS
Also makers Little Giant Frame Extensions, Hand Hoists, Wrecking Cranes.
Write for Circulars, Low Prices
LITTLE GIANT PRODUCTS, INC.
1532 No. Adams Peoria, Illinois

Plastic Lenses by BOWMAN

Real economy; no loss of efficiency: BOWMAN Plastic Lenses withstand ordinary shocks and hard usage. They combine flexibility with high-grade lense service.
In any temperature—red or amber.
FREE Sample immediately upon request to Fleet Operators or Jobbers.
BOWMAN AUTOMOTIVE PLASTICS CO.
4316 W. 192nd Street, Cleveland, Ohio

Available Trucks
Builders of fine Motor Trucks, Tractors, Trailers and Buses since 1910.
Capacities from 1½ to 10 tons.
Write for bulletin
AVAILABLE TRUCK COMPANY
2501 Elston Ave. Chicago, Illinois

Handy
BATTERY BOOSTER
Handy Battery Booster
charges 6-volt battery in about 2 hours — without removing battery from car or truck. Automatic Time Switch prevents over-charging.
Ask for Bulletin No. 88.
Price, complete, $89.50
BALDOR ELECTRIC CO.
4340 Duncan Ave., ST. LOUIS, MO.

Still Serving Only One Master: QUALITY

For years thousands of truck operators have found satisfaction in

Teleoptic Turn Signals

because of their quality. We would like to continue serving you as promptly as in the past, but because we're helping to

"Keep 'Em Flying"

by making high-quality aircraft tools, our deliveries are necessarily slower and based on priorities.

The Teleoptic Co.
Racine, Wisconsin

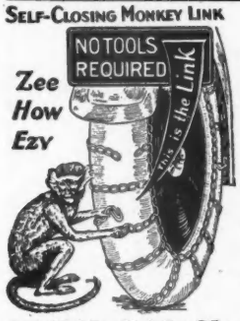
KINNEAR TRUCK DOORS

OPENS UPWARD AND COILS OUT OF WAY! ALL METAL • DURABLE

Lower maintenance . . . Less chance of damage. Always safe from wind. Burglar-proof and fireproof. Write for details.

Also for Buildings
THE KINNEAR MFG. CO.
2100-20 FIELDS AVE.
COLUMBUS, OHIO

SELF-CLOSING MONKEY LINK



Trade Mark Reg. U. S. Pat. Office
Pat. No. 1,438,560

All sizes of
MONKEY LINKS
FREE SAMPLE
to
FLEET OWNERS.
State number of trucks in fleet and size of chains.
FLOWER CITY SPECIALTY CO.
Rochester, N. Y.,
or Your Jobber

REDUCE TON-MILE COSTS ON SEVERE SCHEDULES WITH PRECISION-MANUFACTURED

AUTOCAR
TRUCKS
ARDMORE, PA. AND LEADING CITIES

This Mack Truck branch at Jacksonville, Fla., is representative of 10 such branches completed in the past two years. They contain the last word in equipment and customer convenience

Plant Survey Shows Huge War Material Shipments by Truck

The Michigan State Highway Department has published a report on a state-wide survey of plants producing war materials, showing the number of plants which depend on truck transportation for incoming and outgoing freight. Regardless of the size or location, every one of the 749 plants surveyed ships some part of both incoming and outgoing freight by truck. The report shows incoming and outgoing freight movements as follows:

Incoming Freight: 520 plants—70 per cent of the total—receive half their incoming materials by truck; 281 plants—38 per cent of the total—receive 90 per cent of their incoming materials by truck; 100 plants—13 per cent of the total—receive all their incoming materials by truck.

Outgoing Freight: 561 plants—76 per cent of the total—ship half their products by truck; 316 plants—42.6 per cent of the total—ship 90 per cent of their products by truck; 112 plants—15 per cent of the total—ship all their products by truck.

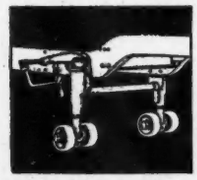
Federal Super-Highways

A Federal law has recently been introduced into the U. S. Senate which would create a super-highway commission composed of two senators, two representatives, one person selected by the AAA and the Commissioner of Public Roads to prepare plans and specifications for a continental highway system comprising two East and West super-highways and two North and South super-highways. The plan provides for establishment and collection of toll charges for use of such highways and the erection of toll houses at appropriate places.

J. Harvey Williams

J. Harvey Williams, president of J. H. Williams & Co. of New York City and Buffalo, manufacturers of drop forgings and drop forge tools, died recently in New York City.

AUSTIN



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A complete line of LANDING GEARS - - - - HORIZONTAL, VERTICAL and FOLDING TYPES.
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Write for complete information on "SAFETY PROPS" and FIFTH WHEELS.

AUSTIN TRAILER EQUIPMENT COMPANY MUSKEGON MICHIGAN

TARDY ROUTEMEN LOSE CUSTOMERS! It's easier to keep old customers than get new ones. Late deliveries "burn up" retailers. Keep supply lines open with Baker Plows. "V," reversible and one-way blade types. Readily mounted on any truck. Built to take it.

Thousands in use by dairies, bakeries, newspapers, bus companies and others. Send for Bulletin 829.

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Oldest and Largest Mfrs. of Snow Plows
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BAKER TRUCK & TRACTOR SNOW PLOWS

AUTOPULSE
ELECTRIC FUEL PUMP

- Uninterrupted Schedules
- Instant Starting
- Greater Economy
- No Vapor Lock
- Added Protection

AUTOPULSE CORP., DETROIT MICH

TOP QUALITY.. LOW PRICE

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Wire and Cable
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ROLLER BEARING CORP.
MASSILLON, OHIO

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